

American Gas *Association* MONTHLY

Mrs. Typical Customer Speaks

•

Natural Gas Research Program

•

Publicity as a Tool of Sales

•

Selling Through the Gas Mart

•

Gas Teams Up With Movies

February



1940

VOLUME XXII NUMBER 2

1. YOU SAVE ON FOOD

2. YOU SAVE ON FUEL

3. YOU SAVE ON UPKEEP

THE WHOLE COST OF COOKING NOW LOWERED BY MODERN GAS RANGES!

"CAN I AFFORD TO BE WITHOUT ONE?" you'll wonder, when you learn the remarkable savings a modern Gas Range makes possible!

It is true—many women find a modern Gas Range actually helps pay for itself. In addition it saves time and brings new beauty to your kitchen!

1 FOOD GOES FARTHER—Waterless cooking on new speed-to-simmer burners prevents vegetables being "boiled away." New low

heat ovens reduce meat shrinkage—make inexpensive cuts deliciously tender.

2 FUEL COSTS ARE LESS—New economy-type 2 top burners cook with less gas. More efficient oven and broiler burners effect new savings. Scientific insulation reduces heat waste from oven and broiler.

3 NO COSTLY REPAIRS—The modern Gas Range has no gadgets to wear out. It will keep its beauty and usefulness for years!



You get all these advanced Range Features only with GAS

CLICK SIMMER BURNER—Dependable low economy flame with "click" signal for waterless cooking.

AUTOMATIC LIGHTING—Nonmatches to strike—No waiting—Instant heat.

GIANT BURNER—For fastest top-stove cooking. Extra wide heat spread for large utensils.

NEW TYPE TOP BURNERS—Concentrate heat on bottom of utensils—save gas—are non-clogging.

SMOKELESS BROILER—Perforated

grill keeps fat away from flame. Eliminates objectionable smoke.

HEAT CONTROL—Assures the desired oven temperature. No more "guess work" baking.

PRECISION OVEN—Pre-heats faster. Holds any required temperature steadily. Reaches high of 500°—new low of 250°.

SCIENTIFIC INSULATION—Holds oven and broiler heat in. Keeps kitchen cooler—saves gas.

Remember, too, you get the benefit of a fuel especially adapted to cooking. It is this combination of the finest cooking fuel and the most up-to-date cooking appliance that makes the modern Gas Range the choice of the modern woman. See the Ranges at your Gas Company Show-room or Appliance Dealer's. They're handsome....smartly styled.

THIS SEAL on a Gas Range assures you that you are getting all of the 22 super-performance standards established by the American Gas Association. It signifies the "Certified Performance" of the Range that carries it—whatever make you buy.



GAS

SERVES YOU
BETTER
THROUGH MODERN
GAS APPLIANCES

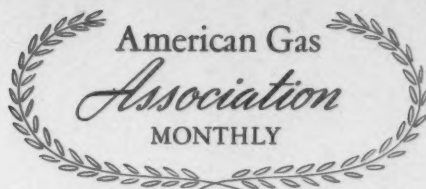


"WASHING UP" IS EASY IF YOU OWN AN AUTOMATIC GAS WATER HEATER!

Then plenty of hot water is always ready. You can let the dishes "drain dry"—eliminating the bother of wiping entirely! Gas Water Heaters are completely automatic. You don't need to nurse them, or wait for them to heat up. And best of all—this work-saving comfort costs but a few cents a day. Ask your Gas Company to suggest the right type and model for your own needs.

AMERICAN GAS ASSOCIATION

LET GAS DO THE 4 BIG JOBS—COOKING • WATER HEATING • REFRIGERATION • HOUSE HEATING



CONTENTS FOR FEBRUARY 1940



The case of the typical gas customer is presented briefly in this issue as a result of that valuable home service survey of cooking trends conducted by Helen Smith and her staff of Rochester. It's recommended reading for those who prepare the advertising copy as well as all others interested in gas sales. . . . Superlatives are in order when describing the work of H. C. Hancock and his Pipeline Subcommittee which is summarized herein. Over a period of years, this single-minded group has done a monumental job of solving natural gas pipeline problems. . . . A primer on gas publicity, how to get it and how to make it work for you, is Harry Smith's contribution to the cause of more gas sales. . . . When five companies pool their resources in a permanent super display of gas appliances, it's real news. The Gas Mart is an interesting development. . . . Any company that sells 84,400 gas ranges, 94.8 per cent through dealers, rates the ear of the gas industry. Marvin Boss tells how it's done. . . . If you think movies don't make good gas advertising copy or promotional material, just read what Jesse Johnson and his alert staff have done in Providence.

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New high pressure gas holders of the Southern Counties Gas Co. of California being assembled and electric-welded on the job. This photograph, taken by James M. Leonard, company engineer, is the second to win a \$5 award in the contest for MONTHLY frontispiece illustrations.



JAMES M. BEALL, *Editor*

MRS. GAS CUSTOMER

.... Home Service Survey of Cooking Trends

ANY gas company salesman knows that to do a good selling job, you have to know your market. Any advertising man knows that to reach real prospects you have to get behind the statistics and find out what's going on in your prospect's mind, then direct your appeal accordingly.

So last year, the Home Service Committee of the Commercial Section was asked to do just such a job by the Domestic Range Committee—to conduct a market survey on cooking trends; in other words to find out what women are cooking, how they are cooking and what they think of gas fuel.

As a result, home service girls in 45 companies throughout the country went directly to gas consumers with pertinent questions. They completed 1,621 surveys, questioning 5,000 women on subjects greatly concerning our industry. These surveys were compiled in the home service department of the Rochester Gas & Electric Corporation under the direction of Helen Smith, home service director. It was a whale of a lot of work but it disclosed the following significant facts which are taken from Miss Smith's report:

Our national gas customer lives in a five- or six-room house and has 3.4 members in her family. She heats water with gas and, as often as not, uses an automatic storage water heater to do it. Her range is older than her refrigerator, but when we get around to her she is going to buy a CP gas range because it has automatic lighting, is pretty to look at, will keep her kitchen cool, is easy to keep clean, and will be a great help to her cooking. And, most important, she is interested in a new gas range because she *likes* to cook!

Yes! She's a creature of habit like the rest of us—and her cooking is no exception. She is in the habit of frying

her meat instead of broiling it. She says this is because she has never paid enough attention to the broiler to get into the habit of using it.

Mrs. Customer makes coffee on top of her gas range once a day, and sometimes two or three times a day, but when making toast she generally uses her electric toaster. Her family has hot cereal two or three times a week and soup once or twice a week. During the week she also serves a roast, baked potatoes, a casserole dish and a cake. She has pie and biscuits almost every week, and makes cookies about every other week. She says she doesn't use her oven more because her family is too small and her old range heats her kitchen. That is her reason for putting insulation third on her list of CP preferences. She should learn about roasting meats

using low temperature.

Our customer is not doing as much home canning as she used to, because she thinks it doesn't pay. It's too much bother, and her family is too small. Quite obviously, she does not know that there are easy, pleasant methods of canning by using her oven.

Mrs. Customer is really open to argument about a CP range. She knows that when someone comes to her door and asks her if she is interested in having a new appliance, that if she says "yes" she may be visited by a salesman. She knows that, and yet 27% of Mrs. Customers said they would like a CP range.

The detailed results of this cooking survey will be issued as an interim bulletin by the Commercial Section in February. We believe the information provides a firm foundation for new efforts in sales promotion and advertising in the gas industry.



Helen Smith

A Broad-Visioned Program of Natural Gas Pipeline Research



Harry D. Hancock

AT the 1922 convention of the Natural Gas Association of America, H. C. Cooper outlined a broad program of standardization and research in the natural gas industry, and suggested cooperation in this undertaking with governmental bureaus and with other trade and technical societies. This program was approved by the Association and a committee, now known as the Main Technical and Research Committee, was formed to proceed with the investigations. Several subcommittees were subsequently organized to specialize on various phases of the investigations.

Follow Original Program

From time to time new subjects were added as portions of the work were completed, but in general the several subcommittees have proceeded with their activities in accordance with Mr. Cooper's original program. Following the merging of the Natural Gas Association of America with the American Gas Association, the program was continued under the auspices of the Natural Gas Department and later the Natural Gas Section of the American Gas Association.

One of the subcommittees, the Pipeline Subcommittee, is the subject of the present discussion. The investigations in which this subcommittee engage require a long time for completion so that the subcommittee's reports presented at the annual meetings are usually progress reports. When a particular project has been completed a final report is issued, but due to the time which elapses between the publication of such reports, many members

- Herewith Mr. Hancock reviews the important work of the Pipeline Subcommittee of the Natural Gas Section's Main Technical and Research Committee. Long recognized and respected by scientific circles both within and without the industry, the contributions described in this article are the achievements of a small group of men working unselfishly over a period of years.
- In addition to Mr. Hancock, who is chairman of the Pipeline Subcommittee, its membership consists of George H. Baird, Arthur F. Bridge, Robert W. Hendee, E. L. Rawlins, Elmer F. Schmidt and T. R. Weymouth.
- This is the second of a series of articles to be published on vital natural gas subjects. The first by Elmer F. Schmidt, chairman of the Section, appeared in January.

By HARRY D. HANCOCK

Gas Advisers, Inc., New York, N. Y.

of the Association may be unfamiliar with the work of the subcommittee.

It was first formed fifteen years ago to undertake the tabulation of information which would be useful to pipeline engineers. From time to time emphasis on the different phases of the work has changed, for the subcommittee has felt that an elastic program, adjustable to changing conditions and ideas within the industry, is preferable to a purely formal consistency which might result in considerable deviation from practical needs by the time a project was completed.

The first name of the group was "The Gas Transportation Subcommittee" and the first publication which bore its imprimatur was the report on pipeline leakage. However, the work on this subject had been practically completed by the time the present subcommittee was formed so that the placing of the leakage study under the

auspices of this subcommittee was purely for convenience in handling.

The second publication, and the only one so far issued which represents a study initiated and completed under the subcommittee's guidance, is concerned with the flow of gas under high pressure transportation line conditions. It was submitted in 1932, and included the results of more than seven years of work.

In 1925 there already existed fairly general agreement that the Weymouth formula for the flow of gas under such conditions was better than any of its predecessors but several other formulas were mentioned in the publications current at that time. The newly formed subcommittee arranged to cooperate with the United States Bureau of Mines in investigations of the flow of natural gas through high pressure transportation lines.

Weymouth Formula Studied

As originally planned, a major part of this work was a comparison of the actual flows through several operating pipelines with the flows calculated by means of the several formulas with which those engaged in the work were familiar. For every line in good condition, the metered delivery agreed more closely with that calculated from the Weymouth formula than it did with the delivery calculated from any one of the other formulas considered. In most cases the metered flow was within a few per cent of that calculated from the Weymouth formula and the subcommittee therefore recommended that formula for use on lines 6" and above in diameter, and thereafter the other formulas seldom appeared in articles on flow and they are now of interest chiefly from a historical standpoint.

While the subcommittee's report in regard to the use and scope of the Weymouth formula received wide acceptance, the subcommittee appreciated

that its recommendation might lead to an uncritical acceptance of the formula by some and to applications which were unwarranted. In its formal report to the Main Technical and Research Committee in 1932, it stated: "The subcommittee has on several occasions stated, and wishes to make clear at this time that its report should not be interpreted as indicating that the Weymouth formula is ideal in every respect."

While this caution may not have been fully appreciated, the subcommittee had no other means of inducing those who quoted from its report to copy with the endorsement of the Weymouth formula the qualifying statement as to its lack of ideality. The subcommittee stated that the Weymouth formula is simple in form and readily usable and that it is reasonably accurate under certain conditions.

The study of the flow of gas in low pressure distribution systems was on the subcommittee's agenda when it was first organized, but after the first year it confined its flow studies to formulas applicable to large flows of natural gas under conditions of high pressure and fairly high pressure differentials. There were also several other subjects which the subcommittee considered at various times. Some of these have been worked on, some have been dropped and some may be investigated further in the future.

Pipeline Flow Problems

In connection with the work on pipeline flow, the subcommittee at one time planned an investigation of the physical properties of natural gas, particularly to determine which properties affected flow through pipelines and what the effects of changes in physical properties might be. It also considered the establishment of a field laboratory in which to carry on special investigations such as the determination of the difference in friction between a line having welded joints and a line having coupled joints.

The subcommittee also concluded that further study should be given to lines six inches and smaller in diameter but later decided that such flow studies be deferred until more need of precise information relative to small lines developed. The subcommittee also planned at one time that a long-time

performance study be made on operating pipelines so as to determine the effect of wide variations in flow, temperature, etc., since the individual pipeline tests which the Bureau of Mines had made were limited to periods of a few weeks.

While the subcommittee presented its formal report on pipeline flow problems in 1932, it continued to cooperate with the Bureau of Mines in the preparation of Monograph 6, "The Flow of Natural Gas Through High Pressure Transmission Lines," and in its publication in 1935.

Hydrates

By 1935 problems involving gas hydrate formations in high pressure pipelines assumed increasing importance in the industry and arrangements were made, on the subcommittee's recommendation, for a cooperative agreement between the American Gas Association and the Bureau of Mines providing for an investigation of the relation between gas hydrates and pipeline operations.

Interest in gas hydrate problems had increased during the several years preceding the beginning of this investigation because of the operation of long transportation lines at pressures which were higher than previously employed. The designers of gas pipelines had always been confronted with the problem of the number and location of drips for the purpose of collecting and facilitating the removal of condensed water. In the case of long and large high-pressure lines, it was desirable to avoid this problem by removing the water from the gas before it entered the pipeline.

One method of dehydration employed was to precool the gas to the lowest temperature it was expected to reach in the line. While this procedure resulted in satisfactory pipeline operation, it was observed that a solid compound formed in the chillers, although the minimum temperature was several degrees above the freezing point of water. A laboratory investigation showed that this formation was not ice, but a compound containing hydrocarbons and water. This experience pointed to the desirability of a complete laboratory investigation of this phenomenon in relation to the operation of gas pipelines under conditions

of high pressure and temperatures both higher and lower than the freezing point of water.

In the report of the Transmission Committee of the Pacific Coast Gas Association in 1933, there was reference to this phenomenon. Two mid-western gas companies had reported to that committee occurrences of an ice formation above normal freezing temperatures, the "ice" being believed to be a hydrocarbon hydrate formed at low temperatures and high pressures.

One of the companies learned through correspondence with a member of the Pipeline Subcommittee that in 1888 there had been published in France an account of the formation of methane hydrate and that information regarding this and the hydrates of other hydrocarbons was to be found in the International Critical Tables. In 1934 a lengthy discussion of the formation of hydrate in this dehydration plant was published and thereafter interest in the subject developed rapidly. This led to the initiation in the Fall of 1935 of the gas hydrate investigation which is now going on.

The program included a review of the literature on the subject, field studies on pipeline systems to determine the relation between the temperature of the gas, the ground temperature and the air temperature, and laboratory investigation of the physical and chemical properties of the hydrates. Further work is being planned on the temperature and pressure of formation and decomposition of hydrates. It is also planned to study further the properties of hydrates of the several components of natural gas and also to attempt to correlate the formation conditions with the composition of the gas.

Gas Compression

The subject of gas compression was also assigned to this subcommittee when it was first organized with the idea that it would publish tables or curves showing the horsepower required for the compression of natural gas under different conditions. Although a considerable amount of work has been done on this subject, a report has not been completed.

In the foregoing paragraphs, attention has been devoted to the research side of the subcommittee's activities. It has, in addition, shared in some of

the standardization and cooperative activities which were outlined by Mr. Cooper. The standardization of materials used in pipeline construction, including the proper weight of fittings and valves for lines of different sizes and working pressures, was suggested by Mr. Cooper as an activity in which the Association should engage. The Pipeline Subcommittee, in accordance with this plan, is represented on the appropriate committees of the American Petroleum Institute and brings to the attention of the members of the Natural Gas Section such changes and suggested changes in the API pipe and valve standards, as are likely to interest the natural gas industry.

Mr. Cooper also pointed out that in the field of manufacturing, much good had been done by the establishment of standards, particularly safety standards, and went on to say that, when it has been found necessary to enact laws concerning safety, these standards have been used as a basis for such laws. Although the natural gas business differs in many basic particulars from manufacturing industry, he continued, the principle of establishing standards has its field of application and similar benefits due to proper standards might be expected.

Safety Code

In accordance with this principle, the Pipeline Subcommittee has cooperated in the development of the American Safety Code for Pressure Piping and has been particularly active in the drafting of the section on Gas and Air Piping Systems. This Safety Code was first published as a Tentative Standard in 1935 by the American Standards Association, whereupon the subcommittee promoted its wide discussion throughout the industry and solicited comments and criticisms. Since the publication of this Tentative Standard, the subcommittee has been active in drafting proposed changes. A revision of the 1935 standard is now in its final stages and a 1940 edition may be published. The revision of the section on Gas and Air Piping Systems has been the subject of special interest to the Pipeline Subcommittee and many drafts have been prepared for the consideration of members of the industry

who have been helpful in working on this problem.

The proposed revision in 1940 does not involve any major changes in those provisions which affect cross-country pipelines, although some changes have been made for the purpose of simplifying the requirements, to make it easier to understand them, and to improve the coordination among the several sections of the Safety Code. The provisions which apply to gas distribution systems have been changed more extensively, and in taking part in this work, the Pipeline Subcommittee has in some measure broadened its activities.

Reports Available

Those who are interested in obtaining further information bearing on the work of the subcommittee may do so by consulting its reports which appear in the Proceedings of the Association and the Natural Gas Section. Before the merging of the two Associations, these reports appeared in the Proceedings of the Natural Gas Association of America.

The 1932 report on pipeline flow was issued in code-sheet form and copies are available from the Association. Bureau of Mines Monograph 6, referred to above, is also available from the Association. The American Standards Association published the Code for Pressure Piping ASA B31.1-1935 and it may be obtained from that Association.

The work on the hydrate investigation has resulted in the publication of three papers by Messrs. Deaton and Frost, of the Bureau of Mines, which appeared in the Proceedings of the Natural Gas Section for 1937, 1938 and 1939, respectively. Two of these were also printed in the A. G. A. MONTHLY, one in June, 1937, and one in September, 1939. In addition to these the Bureau of Mines has published two Technical Papers, numbers 539 and 555, and one Report of Investigation, number 3399, which are concerned with subject matter relating to, but not part of, the cooperative investigations.

The membership of the Pipeline Subcommittee consists of George H. Baird, Arthur F. Bridge, Robert W. Hendee, E. L. Rawlins, Elmer F.

Schmidt, Thomas R. Weymouth and Harry D. Hancock. Due to the long range nature of the investigations undertaken by this group, it was desirable that the same personnel, so far as practicable, continue with the various phases of the work until completed, and accordingly all of the members have served for many years, and several of them since the inception of the subcommittee's program.

The work that the subcommittee has done, is doing, and will do could not be accomplished by the members alone. A large part of it is due to members of the staff of the Bureau of Mines, and the subcommittee has frequently expressed its appreciation of the work of these men. Other members of the industry have been asked to help in connection with various projects, and the response has always been generous and effective. The support of the Association has been invaluable, and the subcommittee has also been able to rely on the help and counsel of the Main Technical and Research Committee and particularly on its Chairman, H. C. Cooper.

Retired Natural Gas Leader Dies



John B. Tonkin

AS the MONTHLY goes to press, word has been received of the death on January 26 of John B. Tonkin, outstanding natural gas industry leader who retired in 1936 as president of the Peoples Natural Gas Company, Pittsburgh, Pa., and affiliated companies after 42 years of utility service. Mr. Tonkin died of influenza in Miami Beach, Fla. He was 64 years old.

Always active in Association affairs, Mr. Tonkin served as chairman of the Natural Gas Department in 1934-35. He was a director and past president of the Pennsylvania Natural Gas Men's Association, and was for several years a director of the Natural Gas Association of America.

Mr. Tonkin went to Pittsburgh in 1902 to become treasurer of the Hope Natural Gas Co., was elected vice-president and general manager of the Peoples company in 1918 and became president in 1933. At the same time he was made president of the Columbia Natural Gas Co., the Lycoming United Gas Corp. and affiliated companies.

Your Publicity . . . An Invaluable Industrial and Commercial Sales Tool



Harry W. Smith, Jr.

PUBLICITY is the rough-cut saw of industrial and commercial gas sales! Through the use of this tool—editorial publicity in the trade, technical and business papers of the country—your customer, no matter who or where he is, is told what gas can and does do for those in his very line of business.

Through publicity your prospect is influenced favorably towards gas before you and your direct-selling tactics get to him. He is set to thinking about gas in relation to his business, so that when you, as a sales carpenter, come along with your other sales tools (market surveys, studies of customers' processes and equipment, sales letters, direct-by-mail pieces, manufacturers' catalogs, visits to other jobs, actual designs, formal estimates, etc.) you have less wood to strip away.

That's why we call publicity the rough-cut saw of salesmanship. It simply hacks your market up into 6 or 8 or 10 foot lengths which are easier to handle.

Publicity is also like a saw because any class of sales carpenter can use it on any kind of a job. It is versatile. It can chat about any aspect of gas in industry with any class of magazine reader—in fact, it can chat with tens of thousands of them at once all over the country. It catches your prospect on the subway, in his

By HARRY W. SMITH, JR.

*Director, Industrial Gas Publicity,
American Gas Association*

home, or at the office—whenever he decides to pick up a trade paper and see what's new in his special corner of the business world. It appeals to the big customer and the small, to the commercial man and the industrial, to the most single-tracked shop man and the most exalted bird's-eye-viewing executive. Publicity plays no favorites.

But just because publicity is preliminary and versatile, don't think it isn't a definite sales force. It is! For example, the single little clipping shown on page 48 was directly responsible for a \$9,000 sale of gas-fired equipment to a national concern easily in a position to buy lots more later on. We could give more examples if we had the space. Our point at the mo-

ment is simply that—although publicity cannot undertake to sell your customer from start to finish (you have other sales tools and your own direct-selling effort for that job)—publicity can strike the original spark of interest which may ultimately lead to a sale, and can, by approaching your prospect month-after-month, give him a good speaking acquaintance with gas before you pop in with a definite plan.

Publicity is a rough-cut saw that can tackle any kind of lumber, of any size, at any time. It can't make all the final cuts left to the plane, the chisel and the knife, but it can keep sawing day in and day out to transform a disinterested lumber-pile of prospects into shape for the finer and more careful wood-workmanship of direct-selling techniques.

That's why your Industrial Gas Section, through its Advisory Committee on Publicity, Harry A. Sutton, chairman, maintains the national publicity program we are taking this opportunity to explain. Now let's give our publicity saw a closer look. Let's count its teeth; let's analyze its cuts; and let's look at the kind of lumber it has been sawing for the past year.

The teeth of your publicity saw are, of course, the articles and items your Publicity Committee gets published. Between October 1938, when the industrial gas publicity program was completely reorganized, and October 1939, publication was secured for no less than 476 articles, news items, papers and other features—illustrated with

How Much Industrial Gas Publicity We Get Per Year—and Where

476 articles, news items and features, totaling
10,692 column-inches (891 feet), and including
707 photos, charts, tables and drawings.

That averages 9 items and 14 photos (totaling 207 column-inches) every week of the year.

Since October 10, 1938, publicity placed by the Industrial Gas Section has appeared in 109 leading trade, technical and business magazines (as well as several score daily newspapers) appealing specifically to the following commercial and industrial interests:

Gas Industry, General Utility (13); Metals, Metal Manufacturing (11); General Manufacturing, Plant Maintenance and Operation (7); Utility Company Employees (6); Heating, Air Conditioning, Refrigeration (6); Baking (5); Power (5); Ceramic (5); Restaurant (5); Horticulture, Poultry, Farming (5); Machinery, Mechanical Engineering (4); Plumbing, Contracting (4); Food Manufacturing, Confectionery (4); Gas Appliance Manufacturer Employees (3); Marine, Fishing (3); Hotels (3); Textile, Shoes, Jewelry (3); Sales, Advertising (2); Beauty Shop, Barber (2); Drug, Cosmetic, Chemical (2); Regional Gas Association (2); Paint, Industrial Finishing, Plating (2); Printing, Paper (2); Hospitals, Schools, Institutions (2); Business, Financial (1); Canning, Packing, Bottling (1); Theater, Entertainment (1).

707 photos, charts, tables and drawings.

In other words, 9 items and 14 illustrations are published every single week. In total, we obtain publication for approximately 10,692 column inches of industrial or commercial gas publicity per year. If clipped one

and commercial gas news we actually get published.

What does all this publicity consist of? It includes lots of news items—news items on unusual quirks in gas

to leading plants which use gas in many or ingenious ways, or after attendance at conferences and conventions both within the gas industry and in other fields. It includes complete texts or abstracts of the papers and committee reports which industrial gas men prepare during the year, and for which we obtain publication by calling the material to the right editor's attention.

It includes articles on trends in gas utilization, both generally and in specific classes of enterprise; it includes reports of



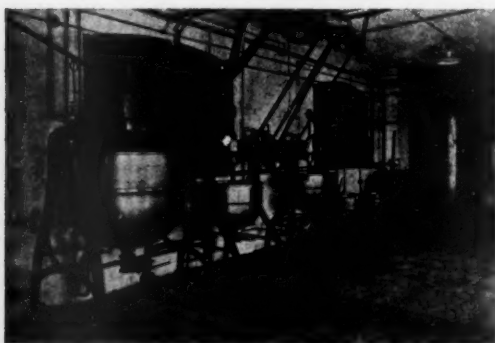
column wide and pasted end to end, the items to be found in our 1939 scrapbook would reach to the top of the World's Fair Trylon, 700 feet into the sky (a good 145 feet higher than the Washington Monument)—and still leave you with 191 feet to spare. And that's only 85 to 90 per cent of the year's total. We estimate that our clipping procedure fails to find at least 10 to 15 per cent of all the industrial

utilization, on committee appointments, on research plans, on the newsworthy doings of the men who comprise the industrial gas fraternity, on new processes and products, on Industrial Gas Section activities, and on interesting statistics, cost data, or experiences with non-residential gas.

It also includes major articles and papers—written after visits to outstanding new installations, after visits

meetings; it includes analyses of our product by leaders in other fields; it includes features of all kinds, news of all kinds and even single-captioned photos or complete picture stories. It would not be difficult to name ten or a dozen types of teeth in our publicity saw which I have failed to mention.

Now for the several types of cuts our saw makes. There's the rip-saw work (with the grain)—that material published within our industry—in the several gas magazines and in utility and manufacturer company house organs. This publicity keeps you posted on what's new outside of your own territory, and tells the easterners what the westerners are doing and vice versa. It also sells management on the job industrial gas is doing. One hundred and eighty-three of the teeth on our 1939 saw were for rip-sawing.



Gas-fired boiler installed to supply a line of steam jacketed preserving kettles. Note condensate return system, which saves much heat at the boiler.

This item in Food Industries (one photo and 150 words) was directly responsible for a \$9,000 sale of gas-fired equipment

Gas Boiler Speeds Preserve Making

Small automatic gas-fired boilers are a good source of controlled heat in the making of preserves. Preserve mixtures usually contain about 60 per cent fruit, 40 per cent sugar, water and pectin to make the mixture jelly. The cooking is done in a copper jacketed kettle and it is said that the faster the cooking the better the flavor. For this reason small batches (50 to 100 lb.) and a seven-minute cooking period are favored. The water and pectin are first put in (3 qt. water for a 100 lb. batch). When mixed thoroughly, the sugar is added and when this is dissolved the fruit is poured in. Mixing must be kept up constantly. Shortly after the mix boils the thermometer in the mix will indicate 222 deg. F., at which time the steam should be immediately turned off and the mix poured out—American Gas Association, New York, N. Y.

they are but 8 of the 109 which have carried news of industrial and commercial gas stemming from A. G. A. headquarters since October 1938.

Now having a saw is one thing and keeping it sharp is another. If our publicity program, however extensive it is, is to have a definite, positive sales effect, it must be planned and executed with that aim in mind. Obviously, editorial publicity cannot talk in sweeping claims and bold sales language—for it has to be news, not ballyhoo, if a reputable editor is to print it at his own expense. But the right kind of publicity can still be good news and be conducive to sales. Our constant aim is to design every line of our publicity specifically to help you sell insofar as that aim is compatible with good news reporting.

A 7-Point Program

Here are a few ways in which the Industrial Gas Section tries to keep your publicity saw sharp—tries to make your publicity *sales publicity* rather than mere article writing or press agency.

1. Each editor (and he's the boss in publicity work) wants a special kind of industrial news—so he gets that kind of news from us. He gets that kind of news—not only because we want to make sure he'll esteem it worthy of printing and ask us for more—but because he (the editor) is the one person who knows exactly what his particular audience will read and consider helpful, and if our publicity is to have a maximum sales effect it's got to be dished up the way the reader wants it. Your sales talks to a vice-president of Continental Baking, and a shop foreman at the Sioux City Tool and Die Works would be considerably different. So are the items we write for *Business Week* and *Modern Machine Shop*. That's one way we keep the saw sharp—by giving the editor (and through him the reader) what he wants.
2. Another is by selecting subjects which give the reader information he can use, or at least interpret in terms of his business. Gas in the manufacture of stratosphere balloons may be all very interesting and worth a short item in many papers. But a story on what gas can do for a job galvanizer (many thousands of them being scattered throughout the country) is considerably better for gas sales.
3. We sharpen the bite of our publicity saw further by always attempting to place our copy with leading magazines having "bull's-eye" circulations—"bull's-

eye" with respect to the appeal of the particular story at hand. If the material discussed has general plant interest, we place it first with a general plant magazine; if it pertains to glass it goes first to a glass paper.

There are over 2,200 trade papers in the United States and Canada, each with a special journalistic job to discharge. To pick those with the best circulations for maximum sales effect with a specific story is quite a job. Your Publicity Committee works with Market Data Book and Standard Rate and Data at its elbow, and spends a lot of its time talking with editors. What's the use of reams of publicity placed before audiences only casually interested in its import?

4. We exploit each item—big or little—to its maximum efficient limit and thus waste none of the marketable value of our editorial wares. We send each item to all "bull's-eye" papers without overlapping audiences. Sometimes that means 6 or 7 magazines. The accompanying illustration offers an example.
5. We double or triple the effectiveness of our publicity saw even further by acting as a clearing house for publicity as well as a producer of it. For every item which we actually dig out and write ourselves, we place with editors two we don't write.

For example, we take advantage of all kinds of papers and addresses given by others (Jimmy Dare's Cleveland paper on "Luminous Gas Flames" was placed in toto or in abstract with 9 different magazines). We submit committee reports and research data for publication—and generally get it. And finally, with the cooperation of certain editors, we take good copy appearing in one magazine and place it, either "as is" or reworked, with other publications whose circulations do not conflict but whose readerships are interested in the subject.

6. Still another saw-sharpening device used is emphasis upon certain subjects for a long enough period of time to build a concentrated cumulative sales effect in one field or for one type of equipment. Instead of writing 100 items on 100 different subjects, we focus 25 on one subject and let the other 75 represent us in the countless other important fields for the time being.

At least 37 of the articles and items written and clipped this year were on gas air conditioning or its applications. Next year we might ride another hobby horse—say space heating or steam generation.

7. Then, too, we keep our publicity saw sharp by keeping the industrial gas man posted on what we are doing. We believe our publicity does a better job if the industry knows about it and can give us help and suggestions. In many cases also we feel that salesmen will want to follow it up and tie it in with specific direct sales work. We keep

the industry posted through the scrapbook, through speeches and through special circular letters. This very article is designed for the sole purpose of sharpening our publicity saw by talking it over with you.

And finally, when an exceptionally good article is published—one which we think fits a great many territories and is the type of thing salesmen would like to show to a customer—we reprint it and send it along. All members of the Industrial Gas Section got two such reprints in 1939.

Publicity Clears Sales Road

In brief, what we have said so far explains why we have an industrial and commercial gas publicity program and what may be expected of it; how much publicity we get and where we get it; and what procedures are practiced to make our publicity an effective sales force towards greater industrial and commercial gas loads. In closing, permit us to emphasize one thought which sums up the sole purpose and function of the A. G. A. Industrial Gas Section Publicity Program—one thought you should remember every time you wonder "What does national publicity do for me?" This is it.

Publicity is one of *your* sales tools. And like all other tools it is designed for one specific job. Publicity is the sales tool especially designed to lick the first obstacle you encounter when you face any prospect, to wit, *Ignorance of What Gas Can Do for Him*. Publicity, day-by-day, line-by-line, in magazine after magazine, is constantly telling *your* prospect about *your* product and its benefits—is constantly sawing away at *Ignorance of What Gas Can Do* to clear the road for direct selling.

Help A. G. A. to Obtain Canadian Data

THE American Gas Association has very kindly consented to add Canadian gas sales statistics, and other data, to its Monthly Summary of Gas Company statistics. This will enable them, as well as we Canadians, to obtain a better idea of our industry's activities from month to month and serve in many ways to show us where our weak spots are. We trust every Canadian gas utility manager will cooperate in supplying whatever data may be required by the A. G. A. to perfect this service.

—The Canadian Gas Journal

The Gas Mart . . . Five Companies

Join Hands to Promote Sales



G. F. B. Owens

THE Gas Mart, which is sponsored by the five gas companies of Long Island, performs the major function of distribution in bringing the products of manufacturers to the ultimate consumers and simplifies dealer-manufacturer-utility cooperation in Long Island's four counties—Kings, Queens, Nassau and Suffolk.

The Gas Mart is devoted exclusively to a continuous showing of the latest modern gas appliances. Its purpose is to utilize all the factors of distribution in order to give the public improved and more economical service. The Gas Mart will furnish the means of closer cooperation among the gas utilities, the manufacturers and the dealers with respect to advertising, financing, dealer relations and sales campaigns. It will become a central hub from which all activities may emanate, utilizing the full power of the gas industry in this

By G. F. B. OWENS

Assistant Vice-President, The Brooklyn Union Gas Co.

area to present to the public a united effort.

The five utilities cooperating in sponsoring this program are The Brooklyn Union Gas Company, the Brooklyn Borough Gas Company, the Kings County Lighting Company, the Long Island Lighting Company and the Queens Borough Gas & Electric Company. The area served by these five companies is regarded as one of America's most popular home centers.

23 Manufacturers' Products

The Gas Mart displays the representative lines of the products of twenty-three leading appliance manufacturers: American Bosch Corp., American Radiator & Sanitary Corp., American Stove Co., Bryant Heater Co., Burnham Boiler Corp., Cleveland Heater Co., Cribben & Sexton Co., Terminix Insulation Co., Estate Stove Co., General Electric Co., General Gas Light Co., Handley Brown Corp., Holland Furnace Co., John Wood Mfg. Co.,

Lennox Furnace Co., Roberts Gordon App. Corp., Roberts & Mander Stove Co., Geo. D. Roper Corp., Ruud Mfg. Co., Servel Inc., Surface Combustion Corp., Tappan Stove Company and the Whitehead Metal Products Co.

The Gas Mart is served by an Information Bureau well staffed with a capable personnel. The Bureau will have on hand at all times complete information with regard to equipment, prices, financing and dealer arrangements for both the customer and the dealer.

In the same building which houses the Mart there is also an auditorium available for public use as well as for education and sales meetings for dealers and salesmen. This auditorium provides the manufacturers with an easy means of holding previews of their new equipment for utility and dealer groups.

Gas Flood Lighting

Adjacent to the building is an enclosed parking space for automobiles and trucks for the convenience of the dealers and the public. At night this parking space will be flood-lighted by gas demonstrating the feasibility of gas for outdoor lighting.

The Mart's central location on Long Island is one of its desirable characteristics. Located in the Brooklyn Union Gas Company Building at 2950 Atlantic Avenue, which is near the Brooklyn and Queens boundary line, the Gas

Exterior and interior views of the Gas Mart. Note the excellent arrangement of the display space in the sketch below.



Mart is easily reached from any point in the four counties. An indication of the central location is evident from the fact that any one may go from Hempstead, Nassau County, to the Gas Mart in twenty minutes.

This central location is important to the manufacturer from the standpoint of moving his equipment in and out of the Mart and to the dealer because he is easily able to take his customers to the Mart for an inspection of an extensive line of gas appliances. The central location also makes it convenient for holding meetings of dealers and sales people. Thus the Gas Mart can well serve as a distribution center for gas appliance merchandising activities on Long Island.

The Gas Mart's display of modern gas appliances is most comprehensive in quantity, quality and variety. This display of the representative lines of the products of twenty-three manufacturers is advantageous to the manufacturers, the gas utilities, the dealers and the public. It allows every manufacturer to place his product before the public and more than two thousand listed dealers. It enables the gas companies to broaden their gas appliance lines without additional expense in order that they may more accurately serve their customers' needs.

Mart Aids Dealers

The Mart gives the local dealer a better opportunity to sell his products because he has been given a complete showroom for his own use, together with other advantages offered by the utilities to the dealers. It complements his own local display and ties him in as a definite part of a broad activity. The dealers' big job now becomes locating the prospect, taking him to the Mart and turning the prospect into a sale.

The effect of the Gas Mart on the public should be a beneficial one to all the agencies cooperating to make it a success, for this Mart demonstrates the manner in which the Gas Industry is prepared to serve the public. It shows Mrs. Homemaker a variety of modern automatic gas appliances which will serve her needs for cooking, refrigeration, water heating and house heating. It will also be of interest to managers and owners of stores and factories, as commercial heating equipment will be

on display. The effect will be a continuous one in view of the fact that the Gas Mart will be a permanent display. Its ultimate aim is to have the prospect for the "Four Big Jobs" visit the Gas Mart before making a decision to buy.

Previously each of the utilities could deal only with a few manufacturers and select a portion of their lines for display and sale. The handicaps of the manufacturers in the past, because various physical limitations prevented handling more lines and lack of direct connection with the utilities can be realized readily. This situation is now remedied through the Gas Mart because representative lines of all participating manufactures are on display. The manufacturers will now be in a position to promote their products aggressively throughout Long Island on an equal cooperative basis.

Advertising Plans

The gas utilities will advertise the Gas Mart through their standard mediums. They will be able to promote the Mart by means of bill enclosures, broadsides, newspaper advertising, truck signs, window and floor displays. A cooperative newspaper advertising program, using the Mart as a central theme, is being planned to advertise the "Four Big Jobs" to the residents of Long Island. Supporting the efforts of the utilities will be the promotion of the manufacturers and the dealers tying in with the general campaign. Following up their determination to present a united effort both in appeal to the public and in competition with others, the gas utilities will strive for similarity in merchandising, dealer and financing methods. With the completion of these plans, gas appliance merchandising will be on a sounder basis and take a more definite place in the minds of the public.

We believe that with the introduction of the Gas Mart as the gas appliance distribution center of Long Island, we have taken a forward step in merchandising. We have facilitated distribution of the products of manufacturers to ultimate consumers. We have given a large number of manufacturers the opportunity to place their products before Long Island's 4,500,000 residents. We have given dealers the opportunity to have a comprehensive dis-

play as an aid to their sales efforts. We have started to impress definitely upon the public the satisfactory manner in which gas appliances and gas fuel meet Mr. Consumer's needs in cooking, refrigeration, water heating and house heating. We have rounded out dealer-manufacturer-utility cooperation.

We have, in brief, effected a cooperative effort for the gas industry. With the real cooperation anticipated this united effort will make a favorable impression on the public and bring profitable results to manufacturers, gas utilities and dealers.

Noted British Gas Leader Dies

SIR FRANCIS GOODENOUGH who retired in 1931, after serving 28 years as comptroller of the gas sales department of the Gas Light & Coke Co. of London, died January 12. He had been with the company more than 43 years.



Sir Francis Goodenough

Sir Francis, who was a leader in the British gas industry and was active in numerous business, educational and charitable organizations, was well known in this country. He visited the United States in 1931 and spoke at

the thirteenth annual convention of the American Gas Association in Atlantic City.

Born in Newton Abbot, Devonshire, the son of the late Henry Goodenough, he attended Torquay Public College and entered the employ of the Gas Light and Coke Company in 1888, serving as comptroller of gas sales from 1903 to 1931.

He was executive chairman of the British Commercial Gas Association, 1912-36; chairman of the International Committee on Distribution, 1931-35, and joint honorary secretary of the National Gas Council. Sir Francis was a member of the London War Pensions Committee from 1916 to 1921 and of the Departmental Committee on Examinations in Part-Time Schools in 1927 and chairman of the Government Committee on Education for Salesmanship, 1928-31.

He was president of the British Export Society in 1929, the Illuminating Engineering Society in 1931, the Incorporated Sales Managers Association, 1929-34; the National Association of Trade Protection Societies and of the Institute of Linguists, 1933-35; of the British Direct Mail Advertising Association in 1935 and of the Incorporated Society of British Advertisers, 1933-36.

Competition Award Goes to All-Gas Home

JANUARY and February issues of *House & Garden* contain further evidence of the high esteem in which architects, builders and home owners hold gas-fired appliances for the modern home.

In making the annual awards in architecture which are selected from all of the homes published by the magazine during the year, the distinguished jury selected an all-gas house as the winner of the \$500 first prize in Class II. It is especially significant that the awards in this class are confined to low-cost homes of six rooms and under, thus emphasizing the economy features of gas-fired equipment.

Noteworthy features of the house,

which is illustrated in the January issue, include a carefully planned but not extravagant kitchen, and service areas which are effectively sequestered in one corner of the house, yet are conveniently placed with relation to both the dining area and the front entrance hall. The laundry space is arranged as an extension of the kitchen area while the furnace is kept in an isolated compartment toward the house center. It is pointed out in a caption that "the heater room is small, gas fired equipment eliminating the need for fuel storage space."

John E. Dinwiddie was the architect of the prize-winning home, which is located in Menlo Park, Calif., and owned by Harold Smith.

The gas industry receives a further boost in the February number of *House & Garden* which illustrates 33 houses, showing exteriors and diagrams of floor plans to-

gether with specification data. Of this group, which includes houses from all sections of the country, 13 are heated and winter air-conditioned with gas.

"It's Only a Penny" Wins Plaque

THE Consolidated Edison Company of New York, Inc., has received a silver plaque from the Publishers Service Company for the finest financial and public utility advertisement printed in a newspaper in 1939. The advertisement so honored is one of the "It's Only A Penny" series featuring a cartoon by George Price of a lady reaching for a coin from one of the World's Fair motor chairs, with the caption, "Relax, Ma'am . . . It's only a penny!"

Middletown's First All-Gas Housing Project



One of the units in Middletown's all-gas housing project, showing views of the kitchen and utility closet. The utility closet, located under the stairway, has an access panel from the garage

WITH model housing projects in many parts of the country joining the swing to gas, unusual attention has centered around the first all-gas housing project in Middletown, New York, one of the units of which is pictured above. Known as the Di-Mill development, this project is composed of four houses at present, with ten more planned.

Falling in the low-cost bracket, these modest homes are in great demand. Each one comprises a living room, dining alcove, kitchen, hall, three bedrooms, bathroom and garage. They have no basement and the gas winter air conditioning unit and water heater are located in a utility closet. Air for ventilation and combustion is supplied through louvers located in the foundation walls through a grille in the utility closet floor.

Some of the pertinent data pertaining to these houses follow:

Heat loss—45,000 B.t.u.
Cubic conditioned area—9,286
Windows storm sashed
Attic insulated, 4-inch glass wool vapor sealed bat type.
Side walls, 7/8" insulation sheet under clapboards

The Rockland Light and Power Company estimated the annual cost of supplying gas for the 4 Big Jobs in each home as follows:

Cooking	\$33.60
Water heating	24.48

Refrigeration	11.54
House heating	90.16
Total	\$159.78

According to W. F. Ward, gas sales supervisor of the Rockland Light and Power Company, some of the ten additional homes which are planned are to be heated by gas-fired forced circulated hot water systems. Mr. Ward also pointed out that the homes already built have a cold air return for each warm air outlet in every room except the bathroom and kitchen.





A. G. A. Testing Laboratories, Pacific Coast Branch

Testing Facilities . . . Laboratories' *Expansion Marks Industry Milestone*

By W. H. VOGAN

*Supervisor, Pacific Coast Branch
Testing Laboratories*

DEDICATED early in the course of its construction, on August 31, 1939, "to promote and develop the gas industry to the end that it may serve to the fullest possible extent the best interests of the public," completion of the new Pacific Coast Branch Testing Laboratories of the American Gas Association is now an accomplished fact. Testing operations in this new building were begun on November 25, 1939, and already the modern and augmented testing facilities they afford have amply demonstrated their ability to meet fully the rapidly growing needs of our industry on the Pacific Coast.

Open House, Feb. 12-15

To commemorate completion of these new Laboratories, opening ceremonies will be held February 12-15. This occasion will afford all interested dealers, and representatives of both manufacturers and utilities to visit and inspect the new testing facilities. Since this event occurs simultaneously with the Spring Sales Conference of the Pacific Coast Gas Association on February 12 and 13, an open invitation has been extended to all dealers to visit the Laboratories at this time. Likewise, invitations were sent to all utility representatives to inspect these modern

Laboratories on February 14 and to all manufacturers on February 15. Tentatively, February 9 is reserved for members of the press to make an advance inspection tour. It is thus anticipated that a considerable number of visitors will attend these ceremonies and become acquainted at first-hand with the new facilities. Laboratories' engineers will serve as guides and demonstrate the equipment and means for testing gas appliances and accessories.

Visitors to the Laboratories at 1425 Grande Vista Avenue will be confronted with an impressive single-story building of the most modern design. Built at a cost of approximately \$40,000 this structure is of reinforced concrete and steel and conforms with local municipal building ordinances to withstand earthquake shocks. The building occupies about 10,000 square feet with an equivalent space in the rear for future expansion now used for parking by visitors and the Laboratories' staff. The building extends from Eleventh Street on the south to an alleyway on the north, thus insuring ready access for delivery trucks.

The simple landscaping of the Laboratories is impressive. At the front, rose trees, shrubs and Catalina cherry trees are neatly arranged. Along the south side of the building oleander shrubs are planted with Catalina cherry trees along the street side of the rear yard. An exterior appearance is thus afforded of which our Association may be justly proud. It sets a note of simple dignity that is maintained throughout.

Since the building is located in a new industrial district with definite building restrictions, the nearby buildings are also modern, having been erected within the past 6 or 7 years.

Gas Space Heater Testing Section



Another advantage of this location is that it is situated only 5 miles from the center of Los Angeles and readily accessible from all points thereof.

Approaching the Laboratories, attention is immediately attracted by a bronze plaque attached to the front wall near the entrance. Inscribed thereon is the motto of the Laboratories, taken from the constitution of the American Gas Association. A similar plaque is exhibited at the entrance to the Cleveland Testing Laboratories. Since this motto was quoted previously, it need not be repeated here; however, its significance is clearly revealed by an inspection of the Laboratories and a study of the staff's activities.

Planned for Utility

The interior of the Laboratories is arranged for the maximum utility of all available floor space. Offices extend across the front of the building, interconnected by means of a hallway, 71 feet long by 5 feet wide. To the right of the reception room are offices of the Supervisor, Assistant Supervisor and Inspectors. To the left are the general stenographic office and Test Report Department. A library and conference room is located on the left front corner of the building. The total area occupied by these rooms is 1860 square feet.

Leading from the hall are four manufacturers' test rooms, a fireproof vault and locker room for the Laboratories' staff. Each is equipped with a test station which supplies the various test gases as well as hot and cold water, and contains a wet test meter, tool bench and necessary equipment. In these rooms, manufacturers may erect and adjust their appliances before sub-

mitting them for test and also make minor changes necessary to secure compliance with our requirements without leaving the premises. A small tool room containing a three-speed drill press, grinder, vise and sheet metal brake also affords added convenience for such work.

Single doors lead from the office section to the manufacturers' rooms, with double doors between these rooms and the testing sections. A solid partition separates the office section from the manufacturers' rooms and test floors. Partitions seven feet high separate the manufacturers' rooms and the test sections. The office section and hallway have asphaltic colored tile flooring. A terra cotta colored concrete floor is provided for the rest of the building. The ceilings of the offices are lined with acoustic board, thus eliminating much of the sound from the offices, as well as from other portions of the building.

Chemical Equipment

Centrally located within the testing section of the Laboratories is the chemical room. This is equipped with all the necessary apparatus for analysing gases and flue products as well as for heating value determinations. Built-in cabinets around this room are provided with transite table tops. About 270 square feet of floor space are available enclosed by glass-windowed partitions 7 feet high.

Immediately to the right of the Chemical Laboratory are the tool room and accessory sections. The accessory room is fully equipped for conduct of the various tests to which such devices are subjected, including life tests. Necessary equipment is assembled on two work tables. One test station, as well as a wet test meter are also provided in this 140 square-foot room.

The number of test stations provided in the various test sections were allocated in proportion to the respective activities. The Central Heating section contains 7, the Water Heater section 4, the Range section 3, and the Space Heater section 3.

Approximately 3200 feet of pipe were required to furnish the outlet required. They supply natural, manufactured, mixed, and butane gases to the meters, and also compressed air, vacuum, and hot and cold water. Con-



Central Heating Gas Appliance Testing Section



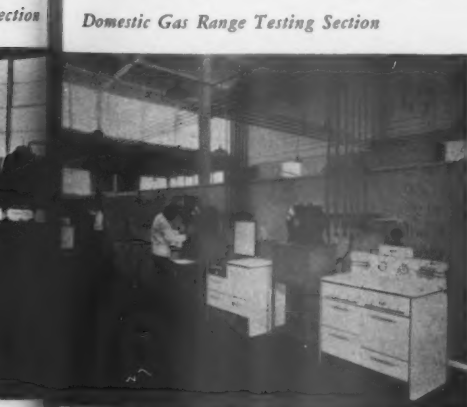
Office of the Supervisor



Gas Water Heater Testing Section

veniently placed electrical outlets are also furnished. For purposes of identification each of the supply lines is painted a different color. These stations are shown in the interior views of the various testing sections illustrating this article.

The space heater section is located to the left of the Chemical Laboratory and encompasses 450 square feet of



Domestic Gas Range Testing Section

working space. The range and water heater sections occupy the full width of the building in front of the Chemical Laboratory. The space provided for testing ranges takes up approximately 700 square feet and for water heaters 600 square feet. Located in the rear of the building are the central heating and shipping sections. Eleven hundred square feet of working area are available for testing furnaces, floor furnaces and unit heaters.

There are 979 square feet of storage space available in the shipping section. Two loading doors 10½ feet wide are provided, one at ground level and the other at truck height. In addition, there is a truck height loading ramp adjacent to the concrete alley. Four hundred square feet of additional storage space is provided in an auxiliary storage building adjacent to the alley in the rear.

A small auxiliary sheet metal shed houses the manufactured, butane and propane gas cylinders as well as the main gas line valves, air compressor and vacuum pump. This unit is in the rear of the main building together with a 325 cubic foot gas holder for manufactured gas, and a 150 cubic foot holder for mixed gas.

Working Space Tripled

A comparison of the testing facilities of the new Laboratories with the former leased quarters reveals a marked contrast. In addition to the attractive appearance of the modern Laboratories building, it offers three times the available working space of the previous rented quarters. Whereas, there were only twelve test stations provided in the old quarters, the new Laboratories have nineteen in operation at the present time. Eleven additional stations can be provided by extending pipe from plugged outlets in the supply lines circulating the testing sections. Thus, ample testing facilities are available to handle the number of appliances submitted for the Laboratories' approval for some time to come, and to meet the anticipated demands of the industry.

It is especially desired at this time to make grateful acknowledgment of the invaluable advice and assistance rendered in the construction of the new Laboratories building by A. F. Bridge, vice-president and general

manager of the Southern Counties Gas Company of California, member of the Laboratories' Managing Committee and the Association's Executive Board. Not only did he take the initiative in pointing out the needs of the industry on the Pacific Coast for a modern laboratory housed in a structure owned by the Association but he personally directed operations to this end. In addition to his own efforts, he most generously made available the technical assistance of his company's engineering staff. Guy Steller worked untiringly on the design of the structure and in the supervision of the many details in its erection. The present building is a fitting tribute to his genius. The entire industry owes a debt of gratitude to Mr. Bridge and his associates. It is most fitting that the new building should have been dedicated by him as evidenced by the inscription on the plaque mounted at its entrance.

Use of A. G. A. Initials is Restricted

USE of the letters "A. G. A." in referring to appliances or accessories approved or listed by the American Gas Association's Laboratories has recently become restricted. This is due to the fact that the American Gas Accumulator Company, and more recently, Aga Stove Company, have for many years been employing the letters "AGA" and "Aga" in advertising and otherwise when referring to their products.

To avoid misunderstandings and confusion, agreements have been entered into by the Association with American Gas Accumulator Company and Aga Stove Company whereby our Association has agreed to use the letters "AGA" only in the following form:

A. G. A. (with a period after each letter)
American Gas Accumulator Company and
Aga Stove Company have agreed to refrain from using this combination of the letters.

In view of the above, it is of importance that the letters in question be employed in their proper form by all member companies and others authorized to use the Association's Seal of Approval or Listing Symbol in any reference to American Gas Association.

In order that no misunderstandings may arise and to prevent possible trademark infringement, it is urged that the form "A. G. A." be employed in all such instances. In no case should the letters be used without a period after each letter. Also, all three initials should be capitalized.

Sprague Meter Adopts Retirement Plan

F. L. FAIRCHILD, president of the Sprague Meter Company, has announced the adoption of a retirement plan to supplement the Federal Old Age benefits for Sprague employees. The plan was made effective as of December 31, 1939, and is guaranteed under an annuity contract with the Equitable Life Assurance Society of the United States.

The plan is on a cooperative basis with the employees and the company contributing toward the purchase of annuity incomes to begin at age 65. Participating employees will contribute 2% of their monthly salary and to each dollar contributed by the employee the company will add \$1.50.

In addition, the company has paid \$200,000 to purchase annuities based upon the present salary and the number of years of service spent in the company's employ in the past in order that the older employees may retire with an income equivalent to that which would have been received had the plan been in force since the beginning of their employment. The total benefits, when combined with the Federal benefits, will provide an income of 50% to 75% of earnings for most of the employees.

Employees who die or leave service before retirement will receive the return of their contributions with 2½% compound interest. Those who leave after ten years of service with the company if they have reached age 45 may take with them the paid-up annuity purchased by their own and the company's contributions.

Philip J. Sweeney Is Dead

PHILIP J. SWEENIE, superintendent of correspondence and office facilities of The Peoples Gas Light & Coke Company, Chicago, and a leader in national accounting activities, died on January 8. His thirty-fifth anniversary with the Chicago company occurred only a few days before his death.

Mr. Sweeney was known throughout the gas industry for his work on various committees of the Accounting Section of the American Gas Association. He made notable contributions during his four-year membership in the Accounting Machines Committee which ended in 1938 when this group completed its work. He was chairman of this committee in 1936. Mr. Sweeney also served as chairman of the Accounting Section Exhibits Committee from 1936 to 1939.

Beginning his public utility career in January, 1905, as messenger in the bill delivery department, Mr. Sweeney rose through various positions in the stationery and mailing departments until he was made superintendent of the former in 1925. In December of that year, he was appointed superintendent of the office facilities department and remained as head of the stationery department. In May, 1937, the correspondence department was also placed under his jurisdiction.

Dealers Who Sell . . . *The Story of Chicago's Spectacular Range Sales*



Marvin F. Boss

WHOLE-SALE and retail dealers sold 94.8% of the 84,400 modern gas ranges bought by Chicagoans this year as against 5.2% by the gas company. This percentage compares favorably

with 94.2% for 1938 and 91.7% for 1937.

However, this increase in the yearly relative percentage of dealer gas range sales to total gas range installations in Chicago does not become truly significant until relative yearly gas range sales in units are considered. On January 1, 1940, approximately 14,021 more gas ranges were sold by retail dealers for the year than were sold in 1938. This is an increase of 23.4%. It is this increase in unit sales which swells gas range dealer's gross volume of business and consequently his net profit.

Factors Causing Expansion

It is natural to ask, "What has caused and what will sustain this increasing dealer activity in gas range sales?"

Dealers, manufacturers of modern gas ranges, as well as Peoples Gas, all agree that there are five factors which have contributed and will continue to contribute to the expansion of the gas range market and to the intensification of gas range sales effort. These are:

- 1—Recognition by dealers of the opportunity for increased profits by marketing an appliance that has a universally high public acceptance.
- 2—The sincerity of dealers in cooperating in promotional plans sponsored by man-

Reprinted from "The Big Four," published by The Peoples Gas Light & Coke Company, Chicago, Illinois.

By MARVIN F. BOSS

Manager, Dealer Division,
The Peoples Gas Light & Coke Co.,
Chicago, Ill.

ufacturers of modern gas ranges and The Peoples Gas Light and Coke Company.

- 3—The inauguration of the EHFA financing plan whereby customers of limited means can make combination purchases



Active Chicago modern gas range dealers and how they grew

and still maintain a high degree of financial peace of mind.

- 4—The ever-growing public appreciation of the plus cooking value of the modern gas range.
- 5—The rapid increase in the number of dealers who are actively selling modern gas ranges.

While each of the five factors mentioned above is specifically helpful in increasing the dealer gas range sales—and this applies to dealer sales of other gas appliances as well—probably the most encouraging sign for greater volume in 1940 lies in the constant in-

filtration of additional dealers who find that selling modern gas ranges is profitable.

This is indicated by the following illustration.

In 1938 the number of Chicago dealers actively selling modern gas ranges was more than double the number in 1937. Before the close of 1939 the active gas range dealers in Chicago, as recorded by Peoples Gas, represent a total of almost *ten times the number of active gas range dealers two years ago.*

Quality Ranges Sold

The modern gas range is an appliance of exceptional merit. Its plus cooking value and the features that identify this cooking value are as vital to the modern housewife as are the many other devices which have emancipated her from household toil and drudgery. It is demand for the finest in cooking equipment that has stimulated the dealer in gas ranges to sell quality models. Inasmuch as a popular measure of quality is price, it is interesting to note at this point that whereas the average price of a modern gas range sold by Peoples Gas in 1938 was \$109, this average selling price during 1939 increased to \$117.

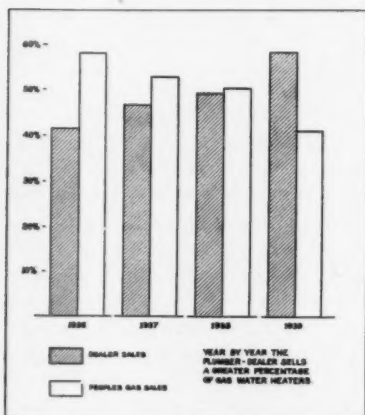
All in all it is truly exhilarating to review our cooperating dealers' successes in selling modern gas ranges during 1939. In spite of the tremendous promotional pressure on competitive equipment; notwithstanding the absence of any unusual general business upturn; and recognizing the hundreds of other commodities in competition for the consumer's dollar—still gas range sales during 1939 increased almost spectacularly. And the gas range dealers have done 94.8% of the job, which after all is practically all of it.

The highly cooperative relations between plumber-dealers and our company is well known by this time. Dur-

ing 1938 and 1939, plumber-dealer sales contests, as well as other specific promotional campaigns, have left their imprint by very definite sales increases and certainly by a clearer mutual understanding of the importance of the plumber-dealer in the Chicago gas automatic water heater market.

Water Heater Sales Up

One picture often tells more than hundreds of words. In the accompanying block chart, plumber-dealer sales and Peoples Gas sales of gas automatic water heaters, expressed each year in the percentage of the total gas automatic water heater installations, show conclusively the productiveness of our mutually cooperative efforts.

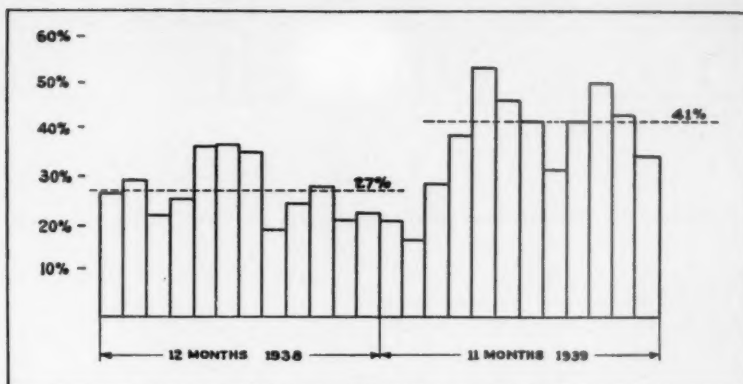


Notice that in the year 1936 our company secured approximately 16% more automatic water heater business than did the plumber-dealers. During 1937 this spread was reduced to 12%, and in 1938 the results obtained were approximately the same for each. But in 1939 the plumber-dealers of Chicago closed 18.6% more business than did Peoples Gas retail selling organization.

This in itself justifies the time, energy and other material expenditures which are necessary in any cooperative promotional work.

In addition, however, the total number of gas automatic water heaters sold in 1939 is better than 52% higher than the total number sold during the entire year 1936.

Such results certainly serve to dis-



Dealers increase their share of the gas refrigerator business

count any fear of increased sales for 1940.

To rehearse in detail the progress made in retail gas refrigerator sales by Chicago dealers would be to repeat in a large measure what has been said concerning modern gas ranges and automatic water heaters.

However, it is timely to show by another block chart that we have distinct problems ahead of us which we together will solve.

Refrigerator Business

The blocks illustrated here show the percentage of Chicago dealer sales (retail) for each month of 1938 and eleven months of 1939, each in relation to the total number of retail installations during the same months. As in the case of modern gas ranges and automatic water heaters, the definite increased activity in dealer sales is clearly indicated. For 1938, dealers sold 26% of the entire retail installations. For 1939, this figure increased to 41%. Also, as in the case of the other gas appliances, the actual number of gas refrigerator units sold in each succeeding year has been markedly higher.

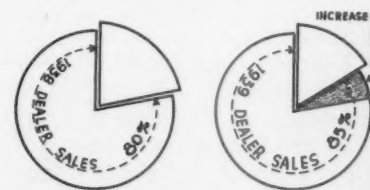
But to get to the problem still before us. It will be observed that from month to month there are distinct variations in the percentage of dealer sales to total sales. Curiously enough variation holds for the total units sold by all sales outlets from month to month. In other words, we have distinct peak months for gas refrigerator sales and we have equally distinct valley months. To raise the valley month sales is our problem. Together we must design

some type of sales incentives which will productively prove that gas refrigeration can be sold equally well in any month of the year.

The Refrigeration Committee of the American Gas Association has resolved to consider this a major problem in their contemplated contribution to greater gas refrigerator sales in 1940. Peoples Gas will, of course, localize any promotional plans so designed and will in every other way assist the dealer in using them productively.

Gas Sales

What has gone before also applies to the sales of gas space heating equipment. Although for 1938 heating contractors sold 80% of the total number of gas furnaces and boilers installed in Chicago, this figure was increased to 85% during 1939. This highly appreciable job is spectacularly illustrated by the accompanying "pie" chart.



This chart tells its own story

As for volume of business secured, in terms of gas-fired boiler and furnace units, the results for 1939 show an increase of 49% above the same period in 1938. It is this total increase in business which is so decidedly encouraging not only to the heating contractors but also to our company, as it is an

index of the productivity of a sincere cooperative promotion.

These last few words lead me to close with a testimonial to the contributing factors of our cooperating relationships.

It is, of course, recognized by dealers and contractors that we have our own highly efficient and productive direct sales organization. In a way this selling organization may be considered competitive with dealers, heating contractors and other agencies who in one way or another sell, supply or endorse gas equipment.

A review of the over-all progress made, however, shows very clearly that such competition is not only stimulating but directly helpful to the common good. As a matter of fact, were it not for the conscientious recognition of the productive value of the dealer and contractor by the sales organization of Peoples Gas, much of the aforementioned cooperative success would not have been realized.

Indianapolis Gas Sales Break All Records

FINISHING the month of December with gains in all brackets of gas consumption, officials of the Citizens Gas and Coke Utility report another record breaking year.

Comparing the year 1939 with 1938, house heating gas consumption set the pace with a record-breaking increase of over 116 million cubic feet reaching a total consumption of 251,679,000 cubic feet for the year. This huge increase is accounted for by the greater number of house heating meters in service, exceeding 1060 on December 31, 1939.

An all time high was reached for industrial gas consumption, too, in the past year. This bracket shows a gain of 178 million cubic feet over 1938, accounted for by increased industrial activity and the two rate reductions made since the Utilities District took over the operation of the gas utility. Industrial gas consumption reached a total of almost 951 million cubic feet in 1939.

Commercial gas consumption increased, too, reaching a total of 346 million cubic feet in the year 1939, an increase of 21 million cubic feet over 1938. Domestic gas consumption totaled over two and a third billion cubic feet last year, an increase of 29 million cubic feet over the year previous.

In the year 1939 the Citizens Gas and Coke Utility sold a total of 3,925,784,200 cubic feet of gas, an increase of better than 328 million cubic feet over 1938.

Gaining impetus with the rate reductions put into effect in May and October of 1936 that effected a savings on the gas bills of Indianapolis' gas consumers amounting to more than a half a million dollars annually, and due to main extensions that amounted to over 162 miles in four years' time, the number of gas consumers has increased by leaps and bounds, reaching a new all-time high each month of 1939. On December 31, 1939, there were a total of 88,901 gas meters in service compared to 85,354 on December 31 of 1938. This represents an increase of over 3,547 gas consumers.

Gas Sendouts Jump

THE *Wall St. Journal* says that while Mr. Average Citizen probably has been cussing the rigors of the prolonged cold wave, the producers, manufacturers and distributors of the things that enjoy an increased demand under the stimulus of low temperatures are chuckling as they contemplate skyward-bound sales curves. Sales of heat-supplying services have gone up, and reports from various parts of the country show sensational increases in the use of gas. Gas sendout of the Consolidated Edison System in New York is recorded as 22% ahead of a year ago. Sales of steam by the same system are up 38%. Sendout of gas by The Brooklyn Union Gas Co. has averaged

31% ahead of a year ago, while in New Jersey the sendout of the Public Service Corp. has increased about 25%.

In Cincinnati the heating load has required an increase of gas sendout of 80%; Columbus is up around 60% and Dayton around 81%. These cities are on the natural gas lines of the Columbia Gas & Electric System. That system also has reported an increase for gas sendout for Binghamton, N. Y., of more than 45%. Peoples Gas in Chicago recorded a gain in sendout of 32%. Figures are given for various other cities where the cold wave has aided both coal and gas sales. Oil burner installations also have been increased.

Alfred P. Post Dies

ALFRID P. POST, retired manufacturer and accountant who was president of the board of directors of the Philadelphia College of Osteopathy, died in Darlington, Md., on January 6. He was 59 years old.

Mr. Post retired from business in 1934. He had been controller of the American Gas Company, now the United Gas Improvement Company, and president of the Appliance Sales Company.

He served as chairman of the Accounting Section of the American Gas Association in 1920 and chairman of the Commercial Section in 1922.

Ask the American Gas Association

By WALTER C. BECKJORD
President

I HAVE been closely associated with the activities at A. G. A. Headquarters since its organization in the early 1920's, and I have always been very much impressed with its organization, efficiency and its facilities and records for giving information relative to the gas industry. One is bound to be impressed with the tremendous amount of information and statistical data which is readily available on call.

I have often felt this is one of the best-equipped organizations of this character I have come in contact with, and since being honored with the presidency I have come to realize what a vast fund of information is available at Headquarters and how helpful it can be to those in the industry. It is frequently necessary to get statistical and historical information in a hurry, and it is always available at Headquarters. I would urge all the members to make full use of these facilities.

At Headquarters there is a library which is probably the finest on gas in the United States; a data file which includes information on every phase of gas operations; and finally a corps of conscientious and experienced workers who either know the answer or how to get it. The entire group of the Headquarters' staff is there for the sole purpose of rendering service to the gas industry as a whole, and to individual members of the Association.

When in need of information—ask the American Gas Association. I think you will find, as I have, the staff at Headquarters will respond pleasantly and satisfactorily. The service is one of the advantages of membership which we should all use.



Prominent local men judging the beef stew contest on the stage of the Providence theatre



An Ideal Team . . . The Latest Movies and Modern Gas Appliances

By JESSE L. JOHNSON

Sales Manager, Providence Gas Co., Providence, R. I.

IT is interesting to find how many movie titles are "naturals" to our business. A good example is the title "Carefree," when Fred Astaire and Ginger Rogers were playing in that motion picture about a year ago.

A few months ago, Charles Boyer and Irene Dunne appeared in "Love Affair." How natural to follow with the phrase, "And, when 'Love Affair' changes to Life Affair every bride will want the labor-saving convenience . . . the cleanliness . . . the economy of a modern Gas Kitchen."

A couple of months ago, Charles Boyer and Irene Dunne appeared in "When Tomorrow Comes." This was another "natural" and lends itself to advertising "And when tomorrow does come, you'll want the unequalled advantages of a modern Gas Kitchen."


A recent tie-in was with the Kay Kyser film musical "That's Right—You're Wrong." This seemed a good opportunity to remind our customers that, if they are using a gas range that is

ten years or even five years old with the idea that they have up-to-date gas cooking equipment, they're wrong. This message, with appropriate mention of the new CP gas range, was included in our theatre lobby display, as is shown on one of the accompanying photographs.

One of our latest promotional endeavors involved that long-awaited hit, "Gone with the Wind." By cooperating with Loew's State Theatre, we were able to use the reverse side of reserve ticket envelopes to advertise gas appliances. Printed in red on these envelopes was the message: "The magic of




There's a corking good picture
you should see at the **ALBEE**
JOHN BARRYMORE in
"The Great Man Votes"



GAS COOKERY
Confesses to get the votes from
men and their wives everywhere... in all walks of life.

• Sixteen million of them... plus.
That's the number of American
homes which have voted for GAS
for cooking and in which it is
being used every day.

• Yes, folks are buying more GAS
ranges. They are appreciating
even more than ever before, the
unequaled speed... the greater
cleanliness, convenience, and



THE GIRL IN WHITE
WILL HELP YOU

Be sure to see
CHARLES BOYER and IRENE DUNNE
in "WHEN TOMORROW COMES"
now playing at the **ALBEE**



and when tomorrow does come,
you'll want the
unequaled
advantages
of a modern
GAS KITCHEN



Be sure to see...
James **GAGNEY** in "Something to
Sing About"

THIS SENSATIONAL NEW PICTURE IS GIVING THE
CROWDS A REAL THRILL AT THE NEW ALBEE BUT...

**HERE'S SOMETHING ELSE
TO SING ABOUT...**

Be sure to see...
THE NEW
**STREAMLINE
GAS RANGES**


17
PERFORMANCE
MODELS

EACH WITH 8 ADDED SELECTIONS OF CONVENIENCE
FEATURES... ALL AVAILABLE IN EITHER WHITE OR
HONEY BROWN...
A TOTAL OF **306** Different Choices


Again we say, be sure to see the unequalled dis-
play of today's most modern cooking appliances
When you see "Jenny Come Home" for the C...



You'll want to see
CHARLES BOYER and IRENE DUNNE
in "LOVE AFFAIR"
now playing at the **ALBEE**



And, When "LOVE AFFAIR"
changes to **LIFE AFFAIR**
every bride will want the
labor-saving convenience...
the cleanliness... the economy
of a modern
GAS KITCHEN



Hollywood has made 'Gone with the Wind' the last word in today's screen entertainment. Modern GAS Cooking and Refrigeration are the last word in today's kitchens... attractive, stylish, designed for the future."

Perhaps our most successful motion picture tie-in came at the time "Fifth Avenue Girl," with Ginger Rogers, was showing at the local Albee Theatre. A promotional program was worked out in cooperation with the New York representative of R. K. O. Radio Pictures. It will be recalled that one of the hit scenes of this picture had to do with the making of a beef stew on a modern gas range.

A Beef Stew Contest was sponsored by the Albee Theatre, in which our company cooperated extensively. Local women were invited to send in to the theatre their favorite beef stew recipe. These recipes were judged by a committee of three prominent women.

Beef stews, made from the six recipes selected by the women judges as prize winners, were made in the kitchen of the Home Service Department of our company by our "Girls in White" and taken to the stage of the theatre piping hot. Certified Performance ranges were connected with gas on the stage and the beef stews were kept hot over the simmer burners.

The judges who were to grade the stews in the order of their excellence were six prominent local men—three in the afternoon and three in the evening.

A Girl in White served the judges from each of the eligible stews. When the order of excellence had been established, the announcement of the prize winners was made by the Promotional Manager of the theatre, who acted as Master of Ceremonies for the

occasion. By way of parenthesis we may say, we have seldom, if ever, seen gas ranges appear so attractive as they did on this theatre stage, expertly spotlighted against an artistic background.

As a further local tie-in, the prizes were in the form of gift certificates drawn on the three large local department stores who display and sell modern gas cooking and refrigeration equipment.



Personal AND OTHERWISE

Appointed Chairman of Rate Committee



Ira L. Craig

IRA L. CRAIG, manager of the rate and standard practice department of the Philadelphia Electric Company, Philadelphia, Pa., has been appointed chairman of the Rate Committee of the American Gas Association, according to an announcement by Walter C. Beckjord, president

of the Association. Mr. Craig has been an active member of the committee which he now heads for a great many years and has made many substantial contributions to its work.

A graduate of Cornell University in 1908 with a degree of Mechanical Engineer, Mr. Craig began his utility career in the same year as assistant to the general superintendent of the Citizens Gas and Electric Company, Waterloo, Iowa. In 1913, he was promoted to general superintendent and later that year was appointed assistant to the electrical engineer of the American Gas Company, Philadelphia, Pa. Five years later he was made electrical engineer and, in 1921, was advanced to rate engineer for all of that company's utility properties which included gas, electric and steam heat utilities.

Following the consolidation of the American Gas Company and The United Gas Improvement Co. of Philadelphia in 1927, he joined the promotion and sales department of the latter company in the position of rate engineer. In 1928, he was employed by the Philadelphia Electric Company in the rate and standard practice department of which he is now manager.

In addition to the American Gas Association, Mr. Craig is a member of the Pennsylvania Gas Association, Pennsylvania Electric Association, of which he was president in 1936-1937, Electrical Association of Philadelphia, Franklin Institute, American Academy of Political and Social Science, American Institute of Electrical Engineers, and Pennsylvania and Philadelphia chambers of commerce.

The A. G. A. Rate Committee is now beginning its twentieth year, having been or-

ganized in 1920 to study all phases of rates and rate-making. The committee has made many authoritative reports to the industry which are published in the Association's printed Proceedings.

W. A. Jones Heads City Service



W. A. Jones

DIRECTORS of Cities Service Company on January 4 elected W. Alton Jones to succeed the late Henry L. Doherty as president. As first vice-president, Mr. Jones had been acting ahead of the company for several years during the illness of Mr. Doherty.

Mr. Jones was born in Webb City, Mo., April 19, 1891. Following his graduation from high school there, he attended Vanderbilt University and in 1912 began his career with the Cities Service System as a cashier of the Webb City and Cartersville Gas Co. in Cartersville, Mo.

After a series of promotions, Mr. Jones was transferred to New York in 1921 and in 1922 he was elected a director of Cities Service Co. In 1925 he became chairman of the executive committee of Henry L. Doherty & Co., and in 1927 he was named first vice-president of the Cities Service Co., which position he held until his promotion to the presidency.

He is chairman of the finance committee of Richfield Oil Co. and is a member of the American Gas Association, the American Petroleum Institute, American Management Association, Lotos Club, Lawyers' Club, Metropolitan Club and Lake Placid Club.

Made Chief Engineer

HARRY L. NICKERSON was elected chief engineer of The Brooklyn Union Gas Company, at a meeting of the board of directors, held December 28. Mr. Nickerson had served as engineer of manufacture since he joined the company in 1925.

Rasch Heads Security Stove Company



William T. Rasch

WILLIAM T. RASCH, first president of the Association of Gas Appliance and Equipment Manufacturers, has resigned as of December 31, 1939, from the American Radiator & Standard Sanitary Corporation to become president of the Security Stove & Manufacturing Co. of Kansas City, Mo.

Mr. Rasch was formerly president of the American Gas Products Corp. which was merged with the American Radiator & Standard Sanitary Corp. in 1938. During the activities of the N.I.R.A., he was vice-chairman of the Gas Appliance Institute and chairman of the water heater division. He is now a member of the board of directors of both the A.G.A.E.M. and the American Gas Association. He also served as vice-president of Gas Exhibits, Inc. which company organized the gas industry's exhibit at the New York World's Fair.

New A. G. A. Director

AT a meeting of the executive board of the American Gas Association held in New York, January 24, James A. Brown, of the Commonwealth & Southern Corporation, New York, N. Y., was elected a director of the Association to fill the unexpired term ending October 1940 created by the death of Henry L. Doherty.

U. G. I. Director



H. P. Liversidge

AT a meeting of the board of directors of The United Gas Improvement Company held Jan. 21 William H. Taylor resigned as a director of the Company and Horace P. Liversidge was elected a Director in his stead. Mr. Liversidge is president of Philadelphia

Electric Company.

The directors at their meeting also declared a dividend of \$1.25 per share on the Preferred Stock and a dividend of 25¢ per share on the Common Stock, both payable March 30, 1940 to stockholders of record at the close of business February 29, 1940.

New York Association Elects Paige



C. E. Paige

CLIFFORD E. PAIGE, president of The Brooklyn Union Gas Company and past president of the American Gas Association, was elected second vice-president of the Electrical and Gas Association of New York Inc. at the annual meeting of the Association held in New York on January 17.

At the same meeting, David S. Youngholm, Westinghouse Electric and Manufacturing Company, was elected president. The following other officers were also elected: J. H. McKenna, Knapp-Monarch Co., first vice-president; T. F. Barton, General Electric Co., third vice-president; Leslie C. Boyd, Van Cortlandt Appliance Corp., fourth vice-president; S. J. O'Brien, S. J. O'Brien Sales Corp., treasurer; Harry C. Calahan, General Electric Supply Corp., secretary; and James W. Carpenter, vice-president, Long Island Lighting Co., assistant secretary.

H. L. Donaldson Heads Personnel Group

HOWARD L. DONALDSON, of Pittsburgh, Pa., has been appointed chairman of the Committee on Personnel Practices of the American Gas Association by Walter C. Beckjord, president of the Association. Mr. Donaldson is director of personnel of the Philadelphia Company and its subsidiaries, which include the Duquesne Light Co., Equitable Gas Co., Pittsburgh Railways Co. and other organizations.

The Committee on Personnel Practices is now in its fourth year as an Association activity. It plans to make important studies of industrial relations problems of the gas industry. Previous work included the compilation of vital data on existing practices and the sponsorship of outstanding speakers at Association meetings.

A graduate of Washington and Jefferson College in 1919, Mr. Donaldson became affiliated with the Philadelphia Company on April 11, 1924. He is well fitted to assume the leadership of the A. G. A. personnel program, having specialized for a number of years on labor and related problems.

He is chairman of the Committee on Em-

ployment Regulations of the Pennsylvania Electric Association, a past president and director of the Pittsburgh Personnel Association, and a member of the American Management Association. He is also a member of the Personnel Research Federation, the Engineering Society of Western Pennsylvania, and the Pittsburgh and Pennsylvania State Chambers of Commerce.

Will Direct Research



S. G. Eskin

also former research engineer of the Edison Electric Appliance Company, Chicago, from which position he was appointed director of the Robertshaw Research Laboratory.

He holds a Bachelor of Science degree from the Massachusetts Institute of Technology and a Master of Science degree from Northwestern University. He has had wide experience with electrical and gas appliances and their problems of proper temperature control.

THE Robertshaw Thermostat Company, Youngwood, Pa., announces the appointment of S. G. Eskin as director of the new Robertshaw Research Laboratory in Pittsburgh.

Mr. Eskin was formerly chief engineer of the American Thermometer Company, St. Louis;

To Direct Fair Exhibit



H. N. Ramsey

Mr. Ramsey is a director of the Association of Gas Appliance and Equipment Manufacturers as well as chairman of its general policy committee. In addition, he is president of the Barclay Corporation (managing the Barclay Hotel), Philadelphia, and a director of the Mortgage Service Co., of Philadelphia.

Gas Exhibits, Inc., is a non-profit, cooperative group of utility executives and manufacturers of the gas industry formed to plan and direct that industry's participation in the New York World's Fair.

H. N. RAMSEY, president of the Welsbach Company, of Gloucester City, N. J., was elected vice-president of Gas Exhibits, Inc., at a meeting held in New York on Friday, January 12, it has been announced by Hugh H. Cuthrell, president of the organization.

Flahive Heads A. M. A. Planning Group

LEADERS of American Gas Association activities are frequently leaders in other fields. An example of this is the case of F. B. Flahive, chairman of the Accounting Section, who headed the important Conference Planning Committee of the American Management Association's Conference on Financial Management which was held January 24-25 in New York. Mr. Flahive is vice-president of the A.M.A. Finance and Accounts Division as well as comptroller of the Columbia Gas & Electric Corp., New York.

The conference, which placed emphasis on everyday problems of financial management, was a conspicuous success.

Kerrins Promoted



John D. Kerrins

JOHN D. KERRINS, who has been associated with The Sprague Meter Company at Bridgeport, Conn., for the past twenty-two years as supervisor of production and cost, became assistant general manager of the company on January 22.

Mr. Kerrins is considered an authority on meter leather tannage. He has been in charge of material experimentation and tests for a number of years.

A. J. Llewellyn Retires

THE retirement of A. J. Llewellyn as president and the election of R. R. Van Horn to the position was announced by the Luzerne County Gas & Electric Corporation, effective December 31.

Mr. Van Horn, who now becomes president, has been a vice-president since January, 1929. He has been associated with the public utility business in Wyoming Valley for more than 35 years, first entering the employ of the Luzerne County Gas & Electric Corp. on July 1, 1908, after a few years spent independently in the utility field.

Mr. Llewellyn's retirement comes after 39 years of service to the Luzerne Company, covering practically his entire business life. Born and reared at Plymouth, he first became an employee of the company in 1901. Reading meters was his first job, and then in succession, he passed through almost every job in the company. Collector, bookkeeper, solicitor, arc lamp trimmer, lineman, superintendent, manager, vice president, and finally, on April 23, 1928, he was elected to the presidency.

AFFILIATED ASSOCIATION *Activities*

Southern Gas Association Annual Convention

UNDER the leadership of C. H. Zachry, president of the Southern Gas Association, a comprehensive program of wide appeal has been prepared for the annual convention of the Association which will be held February 12-14 at Hot Springs, Ark. In addition to the general sessions, there will be meetings devoted exclusively to residential and industrial gas sales, home service, and technical sales. Attractive entertainment features and an industrial gas inspection trip will round out the program.

The residential gas sales conference, under the chairmanship of L. M. Taylor, will concentrate on sales methods, advertising, sales training, market studies, customer and personnel relations, and consumer problems. This meeting is being jointly sponsored with the Commercial Section of the American Gas Association. Davis M. DeBard, chairman of the A. G. A. Commercial Section, will be one of the principal speakers.

Industrial gas sales meetings will cover a variety of applications, sales problems and equipment developments. D. W. Reeves will preside at these sessions.

The technical gas sales conferences, with Chairman Aaron Bush presiding, will run the gauntlet of engineering problems facing the industry, with particular attention to employee training, air conditioning developments, regulator performance, welding methods and leakage problems. A round-table discussion led by O. C. Waters, Atlanta, C. R. Lawrence, Atlanta, and W. A. Dunkley, Memphis, will be a high spot of the meetings.

CP range promotion will be spotlighted on the home service program which will be directed by Chairman Marion Dow.

Wisconsin Utilities Association

ARRANGEMENTS have been made by the Wisconsin Utilities Association to hold the annual convention of the Gas Section in Milwaukee at the Pfister Hotel, March 11 and 12, during the Home Show week. This will permit delegates to inspect new appliances being placed on the market by manufacturers who are exhibiting at the show.

Plans are being completed for a pro-

gram dramatizing the gas industry's sales, production, distribution and service activities with the objective of improving efforts of companies to perform a more effective streamlined selling job. Tentative proposals call for a full day being devoted to combination sessions of the technical and commercial divisions with the gas story being told in the form of a combination skit, quiz and demonstration.

The second day of the convention will be devoted to a personalized exploration of company problems featuring discussion forums led by committees. G. A. Anderson is chairman of the technical division and L. A. Dubberke heads the commercial group.

Pacific Coast Gas Sales Meeting

BILLED as "the annual style show of the latest fashions in sales promotion," the Spring Sales Conference of the Pacific Coast Gas Association will be held in Los Angeles, Calif., February 12-13. A few weeks earlier than usual, these dates coincide with the open house planned that week for the new building of the Pacific Coast branch of the A. G. A. Testing Laboratories.

A. F. Rice, chairman of the sales and advertising section, has charge of the program which is featuring the presentation of sales ideas of men on the firing line. Salesmen will not only be given a chance to air their pet ideas but also to win prizes for them. There will be prizes for each idea placed on the conference program.



Gas engineering class at Brooklyn Polytechnic Institute. Left to right, front row: F. D. Williams, A. Gschwind, Jr., H. K. Robinson, W. D. Bartley and J. Devlin. Center row: M. Bermann, F. T. Smith, F. J. Huber, V. C. Novarino and E. J. Botsch. Back row: J. L. Shannon and A. Weyershausen. Professor Church is on the right. (Photographed by A. Gordon King, of A. G. A. staff)

Another Use of Natural Gas

RECENT experiments have shown that a medicinal can be prepared simply and economically from nitroethane, obtained by nitrating the ethane of natural gas, and benzaldehyde, the oil of bitter almonds, which is made of coal tar.

A related compound, ephedrine, previously made by extraction from a Chinese plant, "ma Hwang," is obtainable also by a modification of the process. Researchers point out that a large number of raw materials not heretofore readily accessible to the chemical industry are easily produced by the nitration of certain types of hydrocarbons, and that the new method is opening a great new field of industry.

Gas Engineering Course in Thirteenth Year

NOW in its thirteenth year the evening session course in the elements of gas engineering at the Polytechnic Institute of Brooklyn, Department of Chemical Engineering, has started its series of twenty-eight lectures which run from September to May, covering the fundamental principles of production, distribution and utilization of gas.

Twenty-two laboratory sessions are included in the course in which experiments are made by the students in connection with the physical properties of gases; the preparation and chemical properties of fuel gases and gas analysis; the flow and measurement of gases including compression, pressure and temperature measurements and boiler testing and gas utilization.

Since its inception, upwards of 400 men, all employees of metropolitan New York gas companies, have successfully completed the course which is conducted by the regular teaching staff of the Institute, assisted by executives, specialists and engineers selected from the gas industry.

University Gas Course Is Popular

THE Columbia University extension course in American Gas Practice under the direction of J. J. Morgan, professor of chemical engineering, continues to be one of the most popular gas courses in the country. Enrollments in this course since its beginning in October, 1925, have reached the impressive figure of 2011.

One company alone, The Brooklyn Union Gas Company, has accounted for 400 enrollments. A new class of 12 employees from this company enrolled in January.

During the past year, 32 men completed the Columbia course and there were 75 new enrollments, mostly for a period of two years. Of the 366 men who have enrolled since its revision in 1933, one hundred and sixty-three have completed it, 62 have been dropped and 141 are still active.

Laboratories' Engineer Enters Industry

AFTER two and a half years of service with the American Gas Association Testing Laboratories, George Mintner resigned December 30, 1939, to become associated with the engineering staff of The Cleveland Heater Company, Cleveland, Ohio.

Mr. Mintner has served in a number of capacities in the Cleveland Laboratories. Starting in the research department he assisted in several approval requirements investigations, including development of hydrostatic pressure tests for gas water heater tanks and determination of equitable appliance performance tests on butane gas. He was then transferred to the testing department where he became thoroughly familiar with the testing of various types of appliances and accessories submitted for certification. Promotion to the inspection department followed early in 1939. During the past year he has gained wide acquaintance with gas appliance manufacturers as the result of visits to their factories.

Mr. Mintner graduated from Purdue University in 1933 with a Mechanical Engineering Degree. Prior to joining the Laboratories' engineering staff, he was associated with the electrical industry.

Discoverer of Natural Gas Wells Dies

EUGENE COSTE, discoverer of natural gas wells in Ontario and Alberta, and an internationally known geologist, died January 23 at the age of 81. He was a son of the late Napoleon Alexander Coste, engineer on the Suez Canal. He had been a member of the American Gas Association since 1928.

Mr. Coste founded the firm of Eugene Coste & Co., of Toronto, consulting pe-

troleum engineers and geologists, and was active in it until his death. In 1890 he discovered a natural gas well which supplied gas to Buffalo. In 1906 he organized a company to drill a well in Welland County, Ontario, and from this beginning the Union Gas Co. of Canada was formed. The company supplied gas to London, Chatham, Windsor, Hamilton,

Sarnia and other western Ontario towns.

He discovered the Bow Island gas field in Alberta in 1909. He bought the field from the Canadian Pacific Railway in 1912 and organized a company which distributed gas to Lethbridge and Calgary through a 200-mile pipe line which was said to be the longest in the world at the time.

CONVENTION CALENDAR

FEBRUARY

- Feb. 2 Mid-West Industrial Gas Sales Council, A. G. A. Palmer House, Chicago, Ill.
- 12-13 Spring Sales Conference P. C. G. A., Los Angeles, Calif.
- 12-14 Southern Gas Association—Southern-Southwestern Regional Gas Sales Conference Arlington Hotel, Hot Springs, Ark.
- 15-17 Mid-West Gas Sales Conference Palmer House, Chicago, Ill.
- Feb. 29 and Mar. 1 Eastern Natural Gas Regional Sales Conference Fort Pitt Hotel, Pittsburgh, Pa.

MARCH

- Mar. 11-12 Wisconsin Utilities Association—Gas Section Pfister Hotel, Milwaukee, Wis.
- 14-15 New England Gas Association Hotel Statler, Boston, Mass.
- 14-15 American Petroleum Institute, Mid-Continent District, Division of Production Wichita, Kansas
- 18-19 Oklahoma Utilities Association Biltmore Hotel, Oklahoma City, Okla.
- 28-29 A. G. A. Industrial Gas Sales Conference Commodore Perry Hotel, Toledo, Ohio
- 28-29 American Petroleum Institute, Southwestern District, Division of Production Houston, Texas

APRIL

- Apr. 9 New Jersey Gas Association Berkeley-Carteret Hotel, Asbury Park, N. J.
- 11-12 Accounting Section Spring Conference
- 11-12 American Petroleum Institute, Eastern District, Division of Production Columbus, Ohio

- 15-17 Mid-West Gas Association Lincoln Hotel, Lincoln, Nebraska
- 16-18 Southwestern Gas Measurement Short Course University of Oklahoma, Norman, Okla.
- 17-19 Missouri Association of Public Utilities Elms Hotel, Excelsior Springs, Mo.
- 22-23 Gas Meters Association, Florida and South Georgia Hollywood Beach Hotel, Hollywood, Fla.
- Apr. 29-May 2 U. S. Chamber of Commerce Washington, D. C.

MAY

- May 6-10 A. G. A. Natural Gas Section Convention Houston, Texas
- 6-10 A. G. A. Distribution Conference Houston, Texas
- 8-11 National Fire Protection Association Atlantic City, N. J.
- 14-16 Pennsylvania Gas Association Sky Top, Pa.
- 15-17 Natural Gasoline Association of America, Annual Convention Hotel Tulsa, Tulsa, Okla.
- 18-25 International Petroleum Exposition and Congress Tulsa, Okla.

JUNE

- June 4-6 Edison Electric Institute Atlantic City, N. J.

JULY

- July 3-5 Canadian Gas Association—Joint Meeting with Pacific Coast Gas Association Jasper Park Lodge, Alberta, Canada
- Sept. 18-20 Pacific Coast Gas Association Hotel Coronado, Coronado, Calif.

OCTOBER

- Wk. 7 American Gas Association, Annual Convention Atlantic City, N. J.



Accounting SECTION

F. B. FLAHIVE, *Chairman*
E. N. KELLER, *Vice-Chairman*
H. W. HARTMAN, *Secretary*

Accountants Shape 1940 Association Program To Meet New Responsibilities



F. B. Flahive

in its new possibilities, but they are concerned with the heavy responsibilities which have been suddenly forced upon them because of these new conditions.

With these thoughts uppermost in their minds and with a year of constructive achievement behind them, the various committees of the Accounting Section met recently in Chicago, Illinois, under the leadership of Chairman F. B. Flahive and Vice-Chairman E. N. Keller to map out a program which would be most helpful to accountants in the gas industry. While



E. N. Keller

most of the plans are complete, some are still in a formative state and a progressive cooperative program is now well under way. Some of the highlights of this program will be covered in this article.

Spring Conference

Following up last year's highly successful Spring Conference, it is planned to hold a similar meeting on April 11 and 12 at White Sulphur Springs, W. Va. This two-day meeting will spotlight many timely accounting problems and serve as a source of inspiration to the industry. A strong program is now being prepared by a committee consisting of Chairman Flahive, H. E. Cliff, H. C. Moore, Jr., J. L. Conover, and H. A. Ehrmann, last year's chairman of the Accounting Section.

THE accountants of the utility industry face 1940 with optimism, interest and concern. They have seen almost revolutionary changes in the concept of accounting in recent years. They are optimistic because of the broadened scope of their profession; they are interested

Tax Accounting Committee,
C. R. Luebke, *Chairman*



C. R. Luebke

Its purpose and scope has been generally defined as follows:

1. Make a complete study of accounting procedures and practices resulting from tax requirements.
- (a) So as to be of such service to member companies as may be requested.
- (b) With the approval of the Executive Board to keep the membership informed on pertinent tax matters.
2. Cooperate along the above lines with other committees of the Section and the Association.

The first meeting of the Tax Accounting Committee will be held at Association Headquarters on February 9, at which time its organization will be completed and more detailed plans formulated with regard to its activities for the year. The committee will again meet at the Spring Accounting Conference and also at the time of the Fall Convention.

Personnel of the new tax committee, in addition to Mr. Luebke, consists of the following: I. M. Avent, Houston, Texas; Robert M. Campbell, New York, N. Y.; R. E. Chatel, Chicago, Ill.; F. W. Cooper, Newark, N. J.; Alan Cunningham, Boston, Mass.; Arthur E. Erickson, Providence, R. I.; George Lange, New York, N. Y.; W. J. McCoy, Los Angeles, Calif.; A. V. McRee, Detroit, Mich.; A. J. Newman, Wilmington, Del.; W. M. Rice, New York, N. Y.; Victor C. Seiter, Indianapolis, Ind.; and L. V. Watkins, New York, N. Y.

Customer Relations Committee,
H. R. Flanagan, *Chairman*

A significant expansion of activities has been noted in the program of the Customer Relations Committee, headed by



H. R. Flanagan

H. R. Flanagan, Philadelphia Electric Co., Philadelphia, Pa. Realizing that customer relations problems are not confined to customers' bills and accounting operations but are a company-wide problem, this group plans to broaden its scope to include fields other than those connected

with purely accounting practices. It will do this with the full cooperation of other Sections of the Association who will appoint representatives on the Customer Relations subcommittees.

Customer relations problems will be attacked from three angles: the women's viewpoint, problems in utility management and operating department procedures. The subcommittee to study customer relations from the viewpoint of women is made up of W. G. Murfin, Philadelphia, chairman; Harry Jeffs, Fair Rockaway, N. Y.; J. Gordon Ross, Rochester, N. Y.; Beatrice Cole Wagner, Philadelphia; Helen Farrell, Camden, N. J.; and a representative of the Brooklyn Borough Gas Company. The utility merchandising angle will be investigated by a subcommittee headed by George A. Saas, Indianapolis, Ind., while operating department procedures will be analyzed by a group under the chairmanship of E. C. Wegener, Chicago, Ill. The latter study will stress the improvement of procedures in customers' service work. L. W. Tuttle, a member of the Technical Section's Distribution Committee, is a member of the committee.

Participation of the committee in the program of the Spring Conference was discussed at a meeting January 11 in New York. It was agreed that a report should be made, in cooperation with the Customer Accounting Committee, on customer relations angles of current cus-

tomer accounting problems. Customer relations from the management angle are expected to be handled in an address at the A. G. A. Convention. Customer survey methods and other timely subjects will be dealt with in individual papers which will appear in the A. G. A. MONTHLY.

*Customer Accounting Committee,
E. M. Alt, Chairman*

The Customer Accounting Committee, with E. M. Alt, Hammond, Ind., as chairman, has gotten under way with the appointment of several subcommittees and arrangements for conference and convention programs. George W. Fuchs, Philadelphia Electric Co., will head up a subcommittee to prepare a paper on "Collections by Collection Agencies" and E. F. Embree, New Haven Gas Light Co., is chairman of a subcommittee which will report on "Merchandise Accounting Practices."

For the Spring Conference, the customer accounting group hopes to sponsor a demonstration similar in character to the one staged last spring. It will also contribute a paper entitled, "Are Meter Reading Books Worth What They Cost?," to be prepared under the direction of T. P. Johnson, Public Service Co. of Northern Illinois.

*Property Records Committee,
O. H. Ritenour, Chairman*

The valuable work of the Property Records Committee will be continued with principally the same personnel as in 1939, with O. H. Ritenour, Washington Gas Light Company, continuing the direction of this activity. The major portion of the committee's work this year will be directed toward developing methods to be followed in the Perpetuation of Continuing Property Records. Realizing, however, that the Original Cost problem is a very difficult one arrangements have been made for Stuart F. Kosters, a member of the committee with broad experience on this subject, to prepare a comprehensive paper on it.



O. H. Ritenour

In developing the report on the Perpetuation of Continuing Property Records, there will be no subcommittees but each member working independently will prepare a comprehensive outline of a recommended procedure. The completed reports of the several committee members will be made available to member companies either in complete or summary form.

As a number of the members of this committee have had considerable practical experience in property records work, it is expected that the full report of the committee will contain much interesting

information on the progress being made toward solving the Property Records problem. This committee is also planning to take an active part in the Spring Conference and will prepare several articles for publication in the A. G. A. MONTHLY.

*Uniform Classification of Accounts,
A. S. Corson, Chairman*

The Uniform Classification of Accounts Committee under the leadership of A. S. Corson, The United Gas Improvement Co., Philadelphia, is continuing its analysis of any new developments in respect to changes in present systems of accounts, both federal and state.

*Natural Gas Classification Committee,
James Comerford, Chairman*

The Natural Gas Classification Committee, of which James Comerford, Gas Companies, Inc., New York, is chairman, is carrying on its work of the past several years in connection with the proposed classification of accounts of the Federal Power Commission, the National Association of Railroad and Utilities Commissioners, and the various state regulatory bodies, with particular reference to that group of accounts covering wells, leaseholds, field lines and production accounts generally.

*General Accounting Committee,
C. E. Packman, Chairman*

At a meeting in Chicago on November 14 and a subsequent meeting in Cincinnati on January 18, the General Accounting Committee, under the chairmanship of C. E. Packman, of Chicago, has whipped into shape a valuable program of activities. This group will make two important contributions to the program of the Spring Conference. It is also planned to make a progress report at the Spring meeting as well as to report at the Fall Convention of the Association.



C. E. Packman

The following four subcommittees have been organized to study specific phases of general accounting problems: Overheads, P. F. Leusch, chairman; Accounting Problems under the Social Security Act, W. D. Virtue, chairman; Budget Principles and Practices, E. R. Thompson, chairman; and Sales Promotion Accounting, C. E. Packman, chairman. The latter subcommittee will prepare a paper for publication in the A. G. A. MONTHLY or as an interim report. Further meetings of the main committee will be held at the Spring Conference and one prior to the Fall Convention.

*Depreciation Accounting,
H. C. Hasbrouck, Chairman*

In the field of Depreciation Accounting, very significant progress has been made by

the committee headed by H. C. Hasbrouck, of New York. Mr. Hasbrouck has reported



H. C. Hasbrouck

that a better understanding of the whole problem and a clarification of the principles at issue have been brought about during the past year by discussions with the Edison Electric Institute Committee on Depreciation Accounting and through meetings of the A. G. A. and E. E. I. representatives with

the Special Depreciation Committee of the National Association of Railroad and Utilities Commissioners.

After considerable effort, the members of the two committees representing the Accounting Sections of the Association and the Institute were able to agree with substantial unanimity on a statement of the principles that should govern accounting for depreciation. It is felt that the 1939 report of the N.A.R.U.C. Committee reflects the contributions to the problem made by the industry accountants.

A special subcommittee of the two industry committees, under the chairmanship of H. C. Davidson, has been engaged in an analytical study of the actual accounting for retirements by representative companies in both industries, with special reference to a classification of actual retirements by cause. This study will be continued during the present administrative year and should contribute a much better factual background for determination of future policy in accounting for depreciation.

The program of the A. G. A. committee for the current year will be shaped largely by the program of the N.A.R.U.C. Special Committee on Depreciation. The chairmanship of this latter group has been accepted by Hon. Nelson Lee Smith, chairman of the New Hampshire Public Service Commission and last year's N.A.R.U.C. president, thus indicating the great importance attached to the problem by regulatory bodies. There is every reason to believe that the point of view of the gas and electric industries will be fairly considered and that every problem will be decided on sound principles of public utility economics.

Returns Pen After 15 Years

FIFTEEN years ago, when cashier of a gas company, Leonard Speaks of Shreveport, La., lent his fountain pen to a customer to endorse a check and failed to get it back. Recently a man approached him at a political rally. "Are you L. H. Speaks?" he asked. "Yes," Speaks replied. "Well, here's something of yours I've had for fifteen years," the man said, and handed him the pen.

Mirabile dictu!



Commercial SECTION

DAVIS M. DEBARD, Chairman

R. J. RUTHERFORD, Vice-Chairman

J. W. WEST, Jr., Secretary

Expanded National Domestic Sales Program Offers Real Assistance to Gas Companies



Davis M. DeBard

AT a score or more of meetings in November, December and January, committees of the Commercial Section of the American Gas Association have perfected a powerful sales program for the gas industry in 1940. Patterned after the highly successful program of last year,

it incorporates new features which should be of major assistance to all gas companies.

Not only does the program cover broad marketing, advertising and economic problems but it gets down to actual cases with specific sales aids for the major domestic gas services. In addition to groups covering the 4 Big Job applications in the home, new committees such as those on Community Development and Advertising Demonstrations and Merchandise Shows, have been formed to round out a complete program. All committees have been manned and the decks are cleared for action. Let's look at some of them and see what they're going to do for you this year.

Sales Conferences

First of all, the series of regional sales conferences to be held shortly will give the key men a chance to air their views and discuss the major problems confronting the industry. These conferences have always proved to be a splendid source of information and inspiration and should again prove a valuable adjunct to the national sales program. Program highlights are covered in a separate article in this issue.

Riding the crest of popular enthusiasm for quality buying guides, we find the CP program gaining momentum as well as prestige for the gas industry. Successfully launched under the leadership of F. M. Houston, of Rochester, and now under the guidance of George L. Scofield, of Buffalo, and an able Domestic Range Committee, a greatly enlarged program is planned for this activity. The program is co-sponsored by the Association of Gas Appliance and Equipment Manufacturers with Lloyd C. Ginn, chairman of the CP Gas Range Sales Management Committee of the A.G.A.E.M.

* Vice-President, Stone & Webster Service Corp., New York, N. Y.

By DAVIS M. DEBARD*

Chairman, Commercial Section

acting as vice-chairman of the A. G. A. Domestic Range Committee. Personnel of the latter committee is composed of nine representatives of gas companies and nine manufacturer representatives. Eight regional managers and 48 state managers have been appointed to assist the field staff of the A.G.A.E.M.

CP Budget Doubled

With a budget of \$110,000, exactly double that of last year, many new activities are planned. Regional and state CP managers are being supplied with three attention-compelling items to assist them. These are: a sound slide film, "Straight to Your Heart," a set of 45 four-color charts which present the CP range from a food and health savings standpoint, and show that it can pay for itself more than three times during the first ten years of service; and a second film entitled, "The Parade to Profits," which dramatizes in 15 minutes the CP program, the market and profit possibilities.

The first step has been the issuance of a CP sales plan book for the Spring-Summer campaign to stimulate the promotional activities of gas companies and dealers. It consists of a comprehensive 16-page plan book under the theme "Join the Profit Parade," which directs attention to the great potential domestic market for modern gas ranges. This plan book shows how utility and retail dealers can effectively and profitably tie in with national promotion. Emphasis is placed on getting local sales outlets to increase their respective advertising, sales and promotional efforts on behalf of the CP ranges. The consumer theme for the campaign is "Join the Parade to Perfect Cooking."

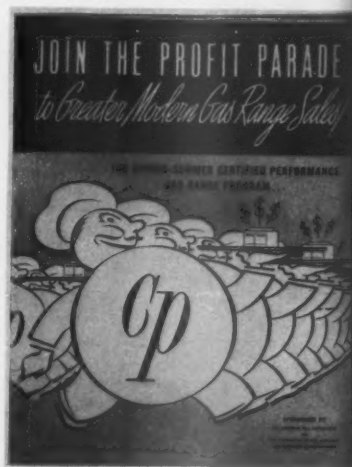
The program calls for continuance of the CP Ranger Club News, the official news organ of the CP gas range salesmen and increased activity in this connection. New trophies will be awarded to gas companies in each of the eight geographic regions and seven contest divisions. In addition, there will be cash prizes for dealer salesmen and trips to the A. G. A. Convention for the highest ranking gas company CP range salesman in each region. All in all, it looks like a big year for this progressive movement.

Water Heating Campaign

Mapping out an aggressive campaign to increase the gas water heating market, the Water Heating Committee under the chairmanship of W. L. Hutcheson, of Pittsburgh, and the vice-chairmanship of J. F. Donnelly, of LaPorte, Indiana, who is chairman of the A.G.A.E.M. Sales Promotion Committee of the Water Heater Division, has been extremely active. Faced with varying conditions affecting water heating service in different sections, this committee has projected a broad-shouldered program of education and active sales promotion.

Of perhaps paramount interest is a proposal to engage a coordinator to address meetings of gas company employees, dealers and others on the promotion of automatic gas water heater sales. This effort will be similar to that now conducted by R. S. Agee and his associates of the A.G.A.E.M. in behalf of CP gas ranges.

An important part of the water heater program is the proposal to prepare three sound-slide films. The first will cover "Automatic Gas Hot Water Service" and will be suitable for showing to consumer groups as well as for a training medium for gas water heater salesmen. A second film will cover sales features and methods, and will be prepared strictly for salesmen. The third film will contain information on the proper sizing, installation, hookups and



This new CP sales plan book strikes a theme of universal appeal. It is being distributed to gas company executives and dealer outlets.

other details bearing on economical and satisfactory operation. A small section will be devoted to large-volume commercial water heaters.

The 1939 architectural manual "Domestic Hot Water Systems" will be reviewed and re-edited for further distribution and a parallel book will be produced for distribution to plumbers, salesmen and others interested in the sale and installation of automatic gas water heaters.

As a further stimulating effort, a national sales contest is planned for sales managers of gas companies who show the greatest progress during 1940. Cash prizes will be awarded to the leading sales managers in each of six divisions and a national award will be presented to the executive of the gas company which has shown the most progress during 1940.

Strong sentiment was expressed by the Water Heating Committee in favor of the inauguration of a national advertising program on automatic gas water heaters to be conducted over a period of years. Such a program is being studied by the committee.

Gas Refrigerator Promotion

Turning now to the refrigeration market, we find that the great increase in sales of this gas product in 1939 has spurred the Refrigeration Committee headed by Bernard T. Franck, of Milwaukee, Wis., to greater efforts this year. With the theme "Life Begins in '40 for Gas Refrigeration" as a touchstone, this group has outlined a year-round selling drive with the campaign divided into four quarters, starting on January 1.

The initial move of the committee was to issue an analytical survey of the gas refrigeration market entitled "Profits for Tomorrow," which is a 24-page summary of trends over the past twelve years. Complete with charts, this booklet clearly proves the desirability of a continuous year-round selling campaign for gas refrigeration.

Following up on this factual analysis of

the market, a portfolio carrying a complete announcement of the 1940 sales plans has been issued to the participating gas companies. This portfolio contains valuable selling information for the campaign, details regarding the rules of the various contests, and other ideas to assist the sales managers in planning their local campaigns.

The first quarter refrigeration drive, which closes March 31, is entitled "The Great Antarctic Exploration" and is aimed primarily at the replacement market. The theme is derived from the Third Antarctic Expedition headed by Admiral Byrd.

A feature of the campaign is the awarding of trophies to winning gas companies which make the outstanding records in each division of the quarterly campaigns for the year. There is a new prize, "Annual Best Performance Award," for the company in each division which attains the best average performance in all the division classifications of competition. Cash and a trophy will be given.

This year refrigerator salesmen will receive cash awards based on their monthly efforts and each quarter campaign sales. In addition to this, cumulative bonuses will be distributed to the salesmen who carry on their sales endeavor continually and successfully. This bonus plan, which is an innovation, is expected to stimulate salesmen to a continuous selling campaign.

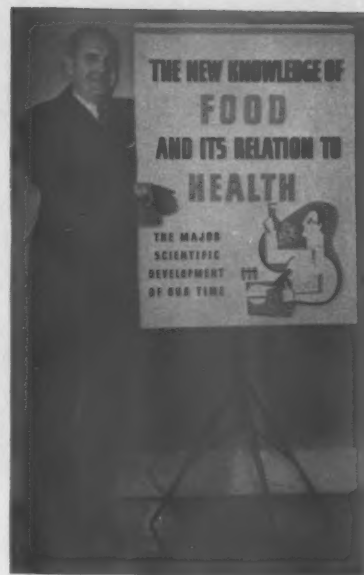
Members of the Refrigeration Committee have been selected on a regional basis and they will arrange for the subject of gas refrigeration to be included on the programs of regional and state gas associations in their territories, working through the Affiliated Association representatives on the Managing Committee of the Commercial Section.

Winter Air Conditioning

Continuance of the remarkable swing to house heating by gas is the major objective of the 1940 House Heating and Winter Air Conditioning Committee led by J. G. Tooker, of Wichita, Kansas, chairman, and W. L. Jacobs, vice-chairman. The full force of this committee is being exerted to insure that the proper grade of gas house heating equipment is available and to develop better installation practices, as well as to increase the efficiency of the sales departments.

Considerable emphasis is being placed on the need for house heating standards analogous to the CP requirements and a national sales program similar to the gas range project. This movement, as well as the proposed national sales program, is being studied by a Subcommittee on New Equipment under the chairmanship of B. H. Wittman.

In addition to Mr. Wittman's group the following subcommittees have been organized to develop the national house heating program; New Sales Methods, C. V. Sorenson, chairman; New Markets, A. W. Lundstrum, chairman; Floor Furnaces, W. L. Jacobs, chairman; Direct Heating, V. L. Block, chairman, and Gas Heating Equipment at the International Heating & Ventilating Exposition, R. O. Glascott, chairman.



George L. Scofield, chairman of the Domestic Gas Range Committee, introduces a new approach to modern gas range selling. The talk entitled "The New Knowledge of Food and Its Relation to Health" stresses proper cooking by means of CP gas ranges

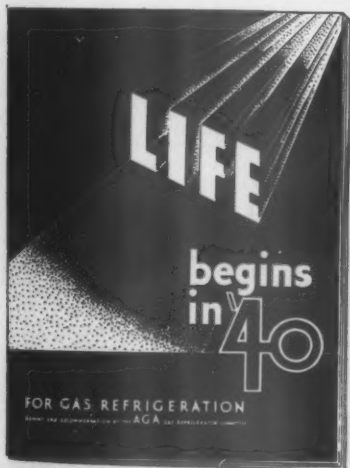
Home Service Work

Growing recognition of the importance of home service work is seen in the comprehensive program of activities laid out for that group by its chairman, Mrs. Eliza M. Stephenson, of Asbury Park, N. J. Continuing its regional organization, designed to reach every section of the country, this committee will participate actively in the various regional sales conferences and conventions. A major part of the home service program this year will be devoted to tying in with the CP range sales promotion program by demonstrations, sales-slanted presentations, kitchen-planning activities, development of a standardized time and temperature chart for use of home service departments throughout the country and development of standard tests for ranges.

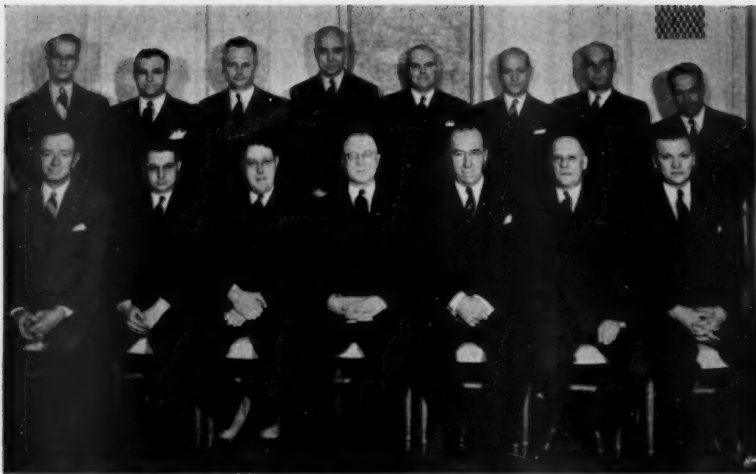
Special attention is being focussed on employee cooperation by the home service group who plan to assemble plans, methods and recipes which are being used successfully in different companies for work with all employees. This information will be used to develop a report on the types of material to present and how to conduct the classes to gain employees' cooperation.

The preparation of consumer booklets will continue with booklets planned to cover both ranges and refrigerators. Other activities included in the agenda are: completion of a water heater booklet which could be used in home service contacts and demonstrations; school cooperation; and home call talks on water heating.

An important new move to improve the public relations of gas companies is now under way with the organization of the



Cover of the portfolio, "Life Begins in '40 for Gas Refrigeration," which contains suggestions for a continuous year-round sales drive



Managers of CP range promotion in six states at a meeting in Kansas City, Mo., January 12 directed by Cy C. Young, regional manager. In the photograph are, left to right, front row: Jesse G. Tooker, chairman A. G. A. Space Heating Committee; C. C. Young; John E. Bogan, A. G. A. E. M. sales counsellor; H. C. Porter, member, A. G. A. Refrigeration Committee; T. J. Strickler, first vice-president of the Association; Watson E. Derwent, chairman, Domestic Range Division, A. G. A. E. M.; and Fred A. Kaiser, of Detroit. Second row: Ray T. Ratliff, member, A. G. A. Copy Committee; H. Vinton Potter, Oklahoma CP manager; A. Kanelkeberg, Colorado CP manager; Ward W. Husted, Wyoming CP manager; Jack Torbert, Kansas City; Charles B. Gillespie, Missouri CP manager; George D. Wells, Kansas CP manager; and Charles D. Greason, Kansas City

Committee on Community Development headed by Hugh C. Thuerk, of New York, N. Y. Started as a result of a recent survey which disclosed that the general public believes that gas companies do not participate in civic activities to the same extent as other utilities, this committee will distribute material encouraging more active participation, and will furnish speakers for convention programs of gas associations throughout the country. Outstanding examples of companies who have done good community development work are being gathered for inclusion in an article to be published in an early issue of the A. G. A. MONTHLY.

New Merchandising Committee

Another new committee, that on Advertising Demonstrations and Merchandise Shows, headed by H. Carl Wolf, of Atlanta, Ga., will stimulate promotional activities on gas service at various consumer exhibits throughout the country.

A significant phase of Commercial Section activities involves the vital field of housing and realty projects. Marcy L. Sperry, of Washington, D. C., is chairman of this group which will coordinate all of the Association's activities on such projects, whether sponsored or financed by private interests or government bureaus.

The Appliance Servicing Committee, under the chairmanship of W. T. Shinholser, of Columbus, will continue its important work aimed toward the creation and retention of satisfied customers by effective servicing. This committee is considering a list of 17 topics recommended for study during the year.

Problems related to appliance financing will be analyzed by a committee headed by R. B. Small, of New York. This group is engaged in the preparation of an interim bulletin on "Recent Trends and Results in Gas Appliance Financing," and a questionnaire designed to uncover regional practices and problems.

H. V. Potter, Tulsa, Okla., continues as chairman of the Window and Store Display Committee, which is contemplating the award of prizes for the best displays of the four major domestic appliances and the sponsorship of one prepared display on each of these uses for companies not having adequate facilities for this work.

The Market and Economic Research Committee, under the leadership of John B. Reid, of New York, N. Y., who served last year, will be available for any special studies on problems that may arise from general economic conditions.

Other committees who are engaged in important work for the gas industry are those on Improving Domestic Gas Appliances, N. T. Sellman, chairman and Comparative Cooking Tests, R. J. Rutherford, chairman. The work of these committees, as well as all others of the Section, is supervised and coordinated by the Managing Committee, with the help and advice of the Nominating and Advisory Committee which is composed of the chairmen from the last four years.

Geared to this national association sales program will be the sales departments of the individual gas companies throughout the country. Working together, they form a potent team to create public acceptance of gas as the preferred fuel for the American home in 1940.

Home Service Employs More People

A TOTAL of 1,200 women are employed in home service work in the United States and Canada, it is revealed in the new list of home service directors compiled by the American Gas Association. This figure compares with a total of 862 reported in 1937 and indicates a growing responsibility placed by gas company managements on home service as a sales and consumer service aid.

An analysis of the figures discloses that 466 of these are employed in the Middle Atlantic states, 103 in the New England states, and 211 in the Southern states. The Middle West accounted for 286 and the Far West for 108. Directors in companies in other countries and in manufacturing companies add another 50 to make a grand total of 1250 who are listed.

Launch Educational Food Program

AN educational foods program related to gas refrigeration was launched in January for home economics students in 21,000 urban high schools throughout the nation. It has been worked out by Jane Tiffany Wagner, of Servel, Inc., in cooperation with Eleanor Howe, of Harvey and Howe, Inc., Chicago, who publish *The Student Home Economist* and *What's New in Home Economics*, through whose pages the program will be projected.

The project is similar to those conducted in the rural education field by 4-H Clubs and County Home Demonstration Agents. A feature of the program is a contest involving outside work by students on food preparation and preservation entailing a knowledge of the gas refrigerator. It also calls for field trips by home economics classes to gas utility companies and for closer cooperation between home economics teachers in urban high schools and gas company home service departments.

Charles B. Babcock Dies

CHARLES BUCKLEY BABCOCK, president of C. B. Babcock Company, prominent wholesale dealers in gas appliances, died January 7 in San Francisco, Calif. Founder of the company bearing his name in 1911, he had become one of the leaders of his industry. He served as president of the Pacific Coast Gas Association in 1917.

Among others, Mr. Babcock's company represented the General Gas Light Company, Kalamazoo, Mich., The Eclipse Fuel Engineering Co., Rockford, Ill., and The Johnston Gas Appliance Co. of Cedar Rapids, Iowa.

He was a pioneer in the gas heating business having been the manufacturer of one of the first gas furnaces offered in the west.

Courses Point Way to More Sales

RECOGNIZING that a trained personnel is a sales personnel, gas companies in all sections of the country are finding that the two new sales courses "Selling Residential Gas Today" and "Sales Co-operation for General Employees of Gas Companies" are proving of material assistance in increasing their gas residential sales.

"Selling Residential Gas Today" is a potent sales getter for salesmen. The course has been tested by a large number of utility companies and has the indorsement of executives and salesmen alike. It includes seven outstanding text units, each with a

presentation of practical problems requiring solution.

Gas companies have found that the Sales Cooperation Course is a splendid medium through which to develop employee confidence in contacting the public and enabling them to give clear, concise answers to questions regarding gas service and appliances.

Meeting manuals are provided for the guidance of those conducting each of these courses. A growing number of gas utility companies are using them as keys to more sales. The cost is low and you will find the investment well worth while. For further information and enrollment blanks address Secretary, Commercial Section, American Gas Association, 420 Lexington Avenue, New York, N. Y.

several interesting symposiums and skits. Speakers include such luminaries as H. N. Ramsey, president, Welsbach Co., Gloucester City; R. W. Carney, Coleman Lamp & Stove Co., Wichita; J. G. Tooker, The Gas Service Co., Wichita; G. Ludwig, Grand Rapids, Mich.; B. T. Franck, Milwaukee, Wis.; Frank C. Smith, Houston Natural Gas Co.; Franklin T. Rainey, The Ohio Fuel Gas Co., Columbus; C. A. Nash, United Light & Power Service Co., Davenport; George L. Scofield, Republic Light Heat & Power Co., Inc., Buffalo; R. S. Agee, A.G.A.E.M., New York, and Colleen Fowler, Kansas City Gas Co.; Edward R. Felber, Madison Gas and Electric Co.; chairman of the conference, Bernard Whitman, The Peoples Gas Light & Coke Co., Chicago, and J. C. Sackman, Northern Indiana Public Service Co., will preside.

Regional Gas Sales Conferences Hold National Spotlight in February

OUTSTANDING utility executives, sales managers and other Association members will gather in three different parts of the country during February to attend important Residential Sales Conferences being held under the sponsorship of the Commercial Section.

The first of the series of conferences, the Southern Southwestern Regional Gas Sales Conference, is being held at the Arlington Hotel in Hot Springs, Arkansas, February 12-14 and covers the states of Alabama, Arkansas, Florida, Georgia, Kansas, Louisiana, Maryland, Mississippi, Missouri, New Mexico, North Carolina, South Carolina, Oklahoma, Tennessee, Texas, Virginia, and West Virginia.

An excellent program has been prepared for the three-day session with top-flight speakers from the south and southwest and other sections of the country scheduled to address the meetings devoted to ways and means of increasing gas sales. Twelve important subjects are listed for discussion.

Featured speakers will be Davis M. DeBard, vice-president, Stone & Webster Service Corp. and chairman, Commercial Section; W. H. Diquid, Jacksonville Gas Co.; C. W. Gale, Knoxville Gas Co.; C. V. Sorenson, Midland Subsidiary Corp., Chicago; E. C. Sorby, Geo. D. Roper Corp., Rockford; T. E. Hawkins, United Gas Corp., Houston; Lyman Hill, Servel, Inc., Evansville; L. L. Peters, Georgia Power Company, Columbus; Emmett A. Smith, Southern Heater Co., New Orleans; J. W. Martin, Lone Star Gas Co., Dallas; W. A. Moore, Mississippi Power & Light Co., Jackson; and others of high calibre. The meetings will be presided over by L. M. Taylor, Mississippi Power & Light Co., Jackson, Miss., chairman of the conference and C. L. Osterberger, Louisiana Power & Light Co., Algiers, La., vice-chairman.

This year marks the fourteenth anniversary of the important Mid-West Regional Gas Sales Conference being held at the Palmer House, Chicago, February 15-17.

A well-balanced and coordinated program has been prepared which will attract gas company executives, representatives and delegates from all companies in the Middle West. Important problems of the gas industry will be subjects of discussion with sales as the basic theme.

Among subjects included in the program are Advertising, Water Heating, Sales Training, Heating and Air Conditioning, A Symposium on House Heating, excellent presentations on Gas Refrigeration, Research, Certified Performance Range Program and

Eastern Natural Gas Meeting

Last but by no means least is the Eastern Natural Gas Regional Sales Conference at the Ft. Pitt Hotel, Pittsburgh, Pa., February 29 and March 1 with sales again dominating the two-day program.

Walter C. Beckjord, vice-president of Columbia Gas & Electric Corp., New York, and president of the American Gas Association, will deliver the keynote address on the morning of February 29. The program is studded with other speakers of outstanding ability and reputation, including R. S. Agee, New York; George Ketchum, Ketchum, McLeod & Grove, Pittsburgh, Pa.; Zenn Kaufman, a nationally known speaker of New York City; R. E. Williams, Binghamton Gas Works, and others. Christy Payne, Jr., Peoples Natural Gas Co., Pittsburgh, is chairman of the conference and George L. Scofield will preside.

24 Manufacturers Renew CP Campaign Sponsorship

TWENTY-FOUR of America's leading producers of modern gas ranges have renewed their sponsorship of the nationwide Certified Performance Gas Range Program according to Frank H. Adams, president of the Association of Gas Appliance and Equipment Manufacturers. This group, as a result of the CP program, accounted for more than 800,000 of the approximately 1,300,000 gas ranges sold during 1939.

The manufacturers who renewed their backing of the CP Gas Range Program are:

A-B Stoves, Inc., Battle Creek, Mich.; American Stove Company, Cleveland, Ohio; Cribben & Sexton Company, Chicago, Ill.; Crown Stove Works, Chicago; Detroit-Michigan Stove Company, Detroit, Mich.; The Estate Stove Company, Hamilton, Ohio; Florence Stove Company, Kankakee, Ill.; Gaffers and Sattler, Los Angeles, Calif.; Glenwood Range Company, Taunton, Mass.; James Graham Manufacturing Company, Newark, Calif.; Hammer-Bray Company, Ltd., Oakland, Calif.; Hardwick Stove Company, Cleveland, Tenn.; A. J. Lindemann & Hoverson Company, Milwaukee, Wisc.; Moffats, Limited, Weston, Ontario, Canada; The Moore Corporation, Joliet, Ill.; Newark Stove Company, Newark, Ohio; Norge Division—Borg Warner Corporation, Detroit, Mich.; O'Keefe & Merriitt Company, Los Angeles, Calif.; Roberts & Mander Stove Company, Hatboro, Pa.; George D. Roper Corporation, Rockford, Ill.; Standard Gas Equipment Corp., Baltimore, Md.; Steiger & Kerr Stove & Foundry Company, San Francisco, Calif.; The Tappan Stove Company, Mansfield, Ohio, and Western Stove Company, Culver City, Calif.



Industrial Gas SECTION

F. T. RAINEY, *Chairman*
H. CARL WOLF, *Vice-Chairman*
E. D. MILENER, *Secretary*

Who'll Do What for Industrial Gas in 1940

IT takes the right team organization as well as the right players to make football victories—and often a simple change of "system" makes a championship squad. The new 1940 committee line-up of the Industrial Gas Section looks like championship material—because it's built on a plan, different to be sure, but designed for hitting the line the hardest just where the future of the national industrial gas load needs it most.

Captain Franklin T. Rainey, Chairman of

By EUGENE D. MILENER

Secretary, Industrial Gas Section

considered by it without due regard to the relation of that class of business to all other classes of industrial load, the General Utilization Committee's contributions cannot help but be significant to every member of the Association. The possibilities of the committee's work are limited only by the group's ingenuity and the amount of ground

Currently, this group is considering the feasibility of developing a standard summary form for all reports of other committees of the Section, designed to emphasize the sales aspects of their content. Also, subcommittees have been appointed to draw up tentative means of nationally evaluating the industrial load in relation to the rest of the business, and to develop material on educational activities and displays planned to assist the industrial sales manager in "selling" his activities.



Franklin T. Rainey



H. Carl Wolf



Charles R. Bellamy



Lawrence E. Biemiller



Clayton S. Conkright

the Section, has put two new power players, a General Utilization Committee and a General Sales Committee, on the field, and has streamlined the rest of his team considerably. Already the new machine is in motion. Hold your seats, industrial gas is headed for the Rose Bowl!

New General Utilization Group

As the first "horizontal" committee of the Section, a blue ribbon General Utilization Committee, composed of fourteen industrial gas veterans, will have for its primary purposes: (1) the stimulating, coordinating and summarizing of the various activities of the other committees assigned to work on specialized fields of gas utilization, (2) the filling-in of the gaps not covered by "vertical" bodies, and (3) the over-all interpreting of gas-in-business practices and developments. Its reports, which will appear from time to time, will avoid an excess of technical detail and will be couched in language both interesting and significant to utility executives and sales managers.

Because of the tremendous scope of this committee's work, and because no single phase of industrial gas utilization will be

that can be covered in a single year. It is anticipated that the General Utilization Committee—and its running-mate, the General Sales Committee—will develop into tremendous motivating forces for future Section activities.

National Evaluation of Industrial Load

The other new "horizontal" group, the General Sales Committee, is already organized and has met, under the chairmanship of H. Carl Wolf, president, Atlanta Gas Light Company, to define its objectives explicitly. This body's attention will be directed exclusively to the sales aspects of industrial gas business in general. It has set for itself the following assignments: (1) to evaluate the industrial and commercial load on a national basis, (2) to investigate the need for additional sales power in this branch of gas industry activity, (3) to assist industrial gas sales departments in devising productive plans and programs and, (4) to encourage further cooperation between manufacturers and gas companies in developing commercial and industrial gas load.

With two "stars" like the General Utilization and General Sales Committees to work from the broad, over-all industry standpoints, the remaining "vertical" committees of the Section will be at liberty to confine expert interest only to the most pressing and promising of current industrial gas sales-engineering problems and to produce such "bull's-eye" type of ammunition as the industrial gas load-building fraternity most sorely needs.

Commercial Cooking Handbook Near

During the past year Lawrence R. Foote's Commercial Cooking Committee has been developing data for a complete, up-to-date handbook on the application of gas in commercial kitchens—one full of sales, engineering, appliance, and kitchen-planning data. This work is now under way at headquarters under the editorship of C. George Segeler and will assist those who are out to develop further the huge and profitable commercial cooking phase of non-residential gas sales.

In addition to sponsoring this handbook, the committee will tackle the competitive sales situation and investigate means of

entrenching gas even more deeply as the fuel for commercial cooking.

Metal Treating and Melting

Two 1939 committees, those concerned with Ferrous and Non-Ferrous Metals, have been combined for 1940, thus strengthening the membership and avoiding duplication of effort in two rather similar fields. Clayton S. Cronkright, Public Service Electric and Gas Co., Newark, New Jersey, has been selected to lead this activity, the Metal Treating and Melting Committee, and will tackle the subjects of furnace atmospheres and the many rapidly developing newer methods of heat treatment. Surface treatments such as nitriding, cyaniding and carburizing will come in for a healthy share of the analysis.

Chairman Cronkright promises that the work in the metals field will be "directed even more towards sales" and that subcommittees will concentrate on those particular divisions of the broad metal-industries field which offer greatest promise for more business.

Natural Gas Co., Tulsa, has set for itself the job of further analysing gas engine accounts covering a greater number of companies than those reported in 1937. It also plans to assemble for distribution to industrial gas sales-engineers further data on: (1) servicing problems (consideration being given to the publication of a second handbook on gas engines exclusively devoted to operation and maintenance matters), (2) lubrication experience, and (3) waste heat utilization refinements. Such work should materially add to the significant 1939 contributions of this group which include publication of the first A. G. A. Gas Engine Handbook, and the issuance of a report bringing the subject of waste heat utilization methods up to date.

Air Conditioning Sales Plan

The committee on air conditioning, recently designated as the Joint Committee on Summer Air Conditioning of the Industrial and Commercial Sections, will undertake the difficult task of starting to make a

for remote cooling in commercial establishments—has available this year more actual installations to study and report upon. It will place the emphasis of its studies on markets, sales possibilities, and sales procedures rather than upon technical aspects—and here's a difficult assignment, for commercial refrigeration with gas, having just emerged from the experimental stage, faces a long-entrenched competitive setup distinctly different from those faced in other branches of non-residential sales work, and one not at all easy to invade.

"Combustion," Fifth Edition, Pending

W. S. Walker's Committee on "Combustion" Handbook will hold in abeyance the fifth edition of the versatile handbook which he and his men keep up-to-snuff—leastwise until the new publication of the A. G. A. Technical Section, "Fuel and Flue Gases," is published and the industry's reaction to it is apparent. Only thus can the two volumes be made complementary to one another.



Lawrence R. Foote



J. P. Leinroth



D. W. Reeves



Harry A. Sutton



George Parker

Case Studies in 180° Water for Sterilization

Lawrence E. Biemiller's Volume Water Heating Committee, which for the past year has been "on bypass operation only" since the completion of its outstanding 1937-1938 work on immersion water heating, now "turns the gas full-on" to fill out and submit valuable case history data which is being assembled regarding the model use of gas for sterilization with 180° F. water at the New York World's Fair.

This coming market—sterilization—promising such brilliant possibilities for commercial sales, has achieved its most thorough development and highest concentration in the World's Fair area through no less than 267 gas-fired dishwashers, sinks and sterilizers, 67 instantaneous gas water heaters installed as "boosters," and 57 gas boilers for water heating—all installed to produce 180° water for Fair purveyors. The first-year service records of these jobs should constitute wonderful guide posts for gas industry pioneering in tableware sanitation.

Data We Want—on Gas Engine Jobs

For 1940, the active Gas Engine Power Committee, under D. W. Reeves, Oklahoma

reality out of its sweeping "Suggested 1940 Gas Air Conditioning Sales Plan"—involving the establishment of an "agency" designed to unify and stimulate the many forces working for gas air conditioning load and to carry the story of gas air conditioning to the 1500 contractor-dealers who fill the final orders for the nation's comfort jobs. Charles R. Bellamy, Columbia Gas and Electric Corporation, New York, N. Y., has been too valuable a chairman to lose and, therefore, is heading into his third term as leader of this activity.

This committee has also, in conjunction with the Committee on Industrial Gas Research, authorized the development of a project for research and test work in co-operation with the American Society of Heating and Ventilating Engineers—the object being to extend current knowledge on comfort air conditioning standards at low relative humidities.

Commercial Refrigeration Committee

A committee new to the non-residential field last year—that concerned with the infant gas refrigerating equipment designed

Advertising and Other Activities Stepped Up

Finally, all five sales promotional committees of the Section have big plans for the coming year. J. P. Leinroth's National Advertising Committee will watch with interest the reaction to non-residential gas copy in the three new media (*Industrial Power*, *American School Board Journal*, and *Chain Store Age*) added to the advertising schedule this year to widen the number of fields regularly addressed; and will aim for improvement in each individual ad by using photographs with greater sales interest, and pictorial values.

Harry A. Sutton's Advisory Committee on Publicity pledges further development of the industrial and commercial gas publicity program reorganized last year, with particular emphasis being laid upon means of keeping the industry posted on activities and results, and of devising means for more thorough use of editorial publicity in individual sales effort.

The Committee on Displays at National Industrial Expositions anticipates entrance into the leading shows of four large customer classifications, to wit, the National

Restaurant Exposition, the National Metal Congress and Exposition, the National Hotel Exposition and perhaps the National Power Show. Concerted effort will be made to step up the dramatic value of Industrial-Gas-Section-sponsored exhibits and to encourage more animated demonstration features in all gas industry booths.

The Industrial Books and Service Letters Committee promises an extra quota of technical helps during the year; and the Section's Program Committee is already hard at work developing programs with maximum appeal and assistance-value for the Industrial Sales Conference (Toledo), the Natural Gas Convention (Houston), the Hotel, Restaurant and Commercial Sales Conference (Atlanta) and the Annual Association Convention (Atlantic City). The needs and interests of utility management as well as of non-residential sales departments will be attended to, it is promised.

"Fuel-Flue Gases" Now Ready

IF you are interested in the results of tests, chemical analyses and interpretation of the work of your chemist, you'll be doubly interested in the new "Fuel-Flue Gases" book which has just been published by the American Gas Association. Prepared by a subcommittee of the Chemical Committee, headed by Louis Shnidman, of Rochester, and edited by C. George Segeler, of headquarters' staff, it's a comprehensive 208-page presentation of authoritative material.

The first five chapters of "Fuel-Flue Gases" deal largely with fuel gases, the sixth chapter with the chemistry of the distribution system and its problems, and the seventh chapter with atmospheres other than those composed of combustion products. The last two chapters deal particularly with gases which result from the combustion of industrial fuels and fuel gases.

Not only the chemist but the production engineer, the utilization engineer, the industrial salesman, the distribution engineer and even the service men are in a position to benefit by the proper application of gas analyses and tests. The chapter on deposits in distribution systems will help the distribution engineer; that on furnace atmospheres for ferrous and non-ferrous metals will interest the industrial engineer; the material on works control by means of chemical analyses will aid the production engineer in maintaining plant efficiency; and the service department will find help in the study of flue gas analyses for obtaining high efficiency from gas appliances.

Leaders of the industry have the following to say about this newest addition to the gas technical publications:

L. J. Willien, chief gas engineer, public utility Engineering and Service Corporation, Chicago; "It is a splendid compilation of valuable data and information and is something which has been needed in the gas industry for some time. This book, together with the Gas Engineer's Handbook and the Gas Chemist's Handbook, consti-

tute valuable books which every gas man should have."

C. R. Locke, superintendent, coke plant, Chicago By-Product Coke Company: "The book covers a real need of the industry."

Large, easy-to-read charts are made possible by the 8½ x 11 inch pages. Bound attractively in oatmeal cloth, "Fuel-Flue Gases" makes a handsome addition to the desk or bookcase. At a price of \$2.50 to A. G. A. members, and \$5.00 to non-members, this text will be at a premium because the first edition is limited to 2000 copies. A prompt order to the American Gas Association, 420 Lexington Avenue, New York City, will assure the prompt receipt of your copy.

Industrial Gas Leader Dies Suddenly



The late Thomas E. Wood (left) shown with Franklin T. Rainey, chairman, Industrial Gas Section, at a recent A. G. A. meeting

INDUSTRIAL gas lost a top-flight man when Thomas E. Wood, manager of industrial sales for The Manufacturers Light & Heat Company, Pittsburgh, Pa., passed away on Friday, December 29, after a sudden illness of ten days.

Almost everyone in the industrial gas field knew Tom for he was extremely active in A. G. A. committee work, both as a veteran of the Industrial Gas Research Committee and an active participant in several Industrial Gas Section groups. He served on the 1940 General Utilization Committee and the 1940 Managing Committee of the Section. The above photograph was snapped at the 1938 A. G. A. Industrial Gas Sales Conference while Tom was chatting with his good friend, Frank Rainey of Columbus, now chairman of the Industrial Gas Section.

Tom Wood was born in Mexia, Texas; first became a machinist; next a factory representative for Franklin Automobile Company; later owner of his own machine shop and foundry at Great Falls, Montana. Since 1923, he has been a gas man—in East Chicago, Indiana; in St. Louis; and, since 1929, in Pittsburgh.

Lekberg Calls Heating Methods a Science

SPEAKING before the Elkhart Industrial Club December 13 on "Keeping Pace with Progress," C. H. Lekberg, supervisor of industrial gas sales of Northern Indiana Public Service Co., Hammond, and a member of the A. G. A. Industrial Gas Section Managing Committee, stressed the importance of proper heat control in developing new processes of manufacture.

As industry has progressed, he pointed out, and requirements have become more exacting, the methods of heat application have become a definite science instead of a haphazard system. He concluded that "heating of materials, especially with gas, has kept pace with progress."

Mid-West Meeting

A MEETING of the Mid-West Industrial Gas Sales Council will be held Friday, February 2, at the Palmer House, Chicago. Sponsored by the A. G. A. Industrial Gas Section, this meeting will feature a question and answer period, and a sound movie produced by the Crane Company. In addition papers will be presented by A. D. Frydendall, of The Peoples Gas Light & Coke Co., on "Application of Gas to Large Boilers" and by T. A. Cohen, Wheelco Instruments Co., on "Combustion Safeguarding and the Elimination of Explosion Hazards."

Milener To Speak

TYING in with the regular MONTHLY feature spotlighting industrial go items, Eugene D. Milener, secretary of the Association's Industrial Gas Section will borrow the title "Going Ahead with Industrial Gas" for his talk before the Southern Gas Association at Hot Springs, Ark., on Feb. 12-14. Mr. Milener will also address the Eastern Natural Gas Sales Conference, Mar. 1 on the subject "Industrial Gas Achievements and Opportunities."

Long Island Lighting Co-Founder Dies

GEORGE W. OLMSTED, co-founder with Ellis L. Phillips of the Long Island Lighting system thirty years ago, died in Ludlow, Pa., on Jan. 15. Mr. Olmsted, who was vice-president and a director at the time of his death, was sixty-five years old.

Mr. Olmsted held offices and directorships in many organizations and was actively interested in community affairs. He was a member of the executive committee of the Empire State Gas & Electric Association.

Going Ahead WITH INDUSTRIAL GAS

Our vote for "best sales promotional piece" goes this month to Surface Combustion's Summer Air Conditioning Division which simply reproduced a letter of inquiry and its answer with no other copy except a flap announcing (as the letters appeared) "MR. GREEN of Kansas City Wants to Know. . ." and "MR. CROSBY of Cleveland Says. . ." Green is an advancement-minded restaurateur; Crosby is a more-than-satisfied Kathabar user in the same category; and the contents of their letters to each other needed no embellishment.

Have you a little fish-hatchery in your territory? In England gas-fired instantaneous water heaters with good thermostat control are used for regulating the incubation period for fish eggs.

Maybe we're late on the draw, but don't fail to read "Quality Control In Food Manufacturing" in the September FOOD INDUSTRIES. W. L. Campbell, general manager of manufacturing for the Kroger chain, describes his company's emphasis on control in every operation, using coffee, bread and hams as examples—and, in doing so, makes comments on roasters, ovens and smokehouses which, coming from such an authority, can help you sell gas equipment.

Next month, you know, comes the Industrial Gas Sales Conference—and this time it's in Toledo, Ohio, a live-wire center for industrial gas if there ever was one. Ralph S. Wenner, The Ohio Fuel Gas Co., and his Program Committee have been at work for weeks already planning features specifically for your profit. If you've got a pet idea, pop it fast. We'll guarantee it an attentive ear.

Have you seen the new air-conditioning type Lectrodryer of 350 cfm. capacity, first shown at the Chemical Industries Exposition in New York last December? It's continuous, redesigned for minimum floor space, and "the answer" for your prospects with summer air conditioning requirements too small for previous gas-fired equipment. George Simpson of Pittsburgh Lectrodryer Corp. wants to know also, "Have you canvassed your territory for dehumidifier sales possibilities with such a midget unit?"

Gas is the fuel used in every application to date of the two newest and most interesting heat-treating processes in the metals field—the Austempering of steel (imparting hardness along with amazing toughness and ductility) and the open-flame annealing of non-ferrous wire (continuously at lightning speeds without furnace or atmosphere tube). "Steel," "Iron Age," "Metals and Alloys," "Wire and Wire Products," and "Heat Treating and Forging," have covered the processes (and their fueling) editorially.

Ask your company-house-organ editor (he'll love it) to run a page of pictures of your most interesting gas-in-industry applications and you write the captions. Example? Sure! Laclede Gas News got 13 fine diversified shots on one page under the banner "Gas Serves Industry In St. Louis." It's the simplest way we know to sell everyone in your company on your department's job.

Your 1939 Industrial Gas Publicity Scrapbook shows that "Iron Age" devoted four full illustrated pages to the report of our last A. G. A. Industrial Gas Sales Conference—and only five to its very own industry's annual Iron and Steel Institute Convention. And that's not bragging either—just a sample of the importance trade paper editors place on modern fueling!

INDUSTRIAL AND COMMERCIAL NATIONAL ADVERTISING FOR FEBRUARY

The National Advertising Committee of the Industrial Gas Section, J. P. Leinroth, chairman, and F. B. Jones, vice-chairman, announces that full-page advertisements will appear in the trade and business magazines listed below during the month of February. These advertisements are prepared in cooperation with the Committee on National Advertising as a part of the Association's national advertising campaign.

Metals Industry		
THE IRON AGE	Feb. 1	Rare metallic elements tamed by
STEEL	Feb. 5	heat-treating with gas in plant
METALS & ALLOYS	Feb.	of Sirian Wire and Contact Co.,
METAL PROGRESS	Feb.	Newark, N. J.
INDUSTRIAL HEATING	Feb.	
Food Industry		
BAKERS HELPER	Feb. 3	New gas-fired oven gives better
BAKERS WEEKLY	Feb. 3	baked goods—more time for
		selling and display—in Joyce's
		Bakery, Minneapolis, Minn.
FOOD INDUSTRIES	Feb.	5 tons of cookies in an 8-hour
		shift—with modern gas equip-
		ment—Jackson Cookie Com-
		pany, Little Rock, Arkansas.
Ceramic Industry		
CERAMIC INDUSTRY	Feb.	Duncan & Miller Glass Com-
		pany, Washington, Pa., depends
		on versatile uses of gas for fine
		glassmaking.
Hotels & Restaurants		
HOTEL MANAGEMENT	Feb.	Modern Gas equipment cuts
		gas consumption 1/2 for Hotel
		Mayfair, Sioux City, Iowa.

AMERICAN RESTAURANT Feb.

CHAIN STORE AGE Feb.
(Fountain & Restau-
rant Section)

MODERN HOSPITAL Feb.

AMERICAN SCHOOL
BOARD JOURNAL Feb.

CHEMICAL & METAL-
LURGICAL ENG'G Feb.

INDUSTRIAL POWER Feb.

Lowly "Hot Dogs" get profit-
lift with modern gas equipment
at Millman's, Newark, N. J.
Modern gas equipment helps
serve 2,500 food orders a day
in May—Liggett Company drug
store, downtown Pittsburgh, Pa.

Hospitals & Schools

Gas—and modern gas equip-
ment—save 25% in fuel for
Albany Hospital, Albany, New
York.

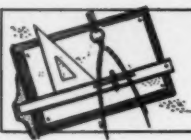
New main kitchen of Agricul-
tural and Mechanical College
of Texas at College Station,
Texas—equipped with new
modern gas equipment.

Processing Industry

Duncan & Miller Glass Com-
pany, Washington, Pa., depends
on versatile uses of gas for fine
glassmaking.

General Manufacturing

Controlled atmosphere gas fur-
nace for bright annealing cop-
per in plant of Revere Copper
and Brass, Incorporated, Rome,
New York.



Technical SECTION

A. M. BEEBE, Chairman
D. P. HARTSON, Vice-Chairman
H. W. HARTMAN, Secretary

Purging and Dismantling of a Gas Storage Holder

By GEORGE F. TYLER

Gas Engineer, Philadelphia Electric Company, Philadelphia, Pa.

THE recently dismantled Ardmore, Pennsylvania, gas storage holder of the Philadelphia Electric Company which was erected in 1905 had a capacity of 500,000 cubic feet. It was of three lift construction and the tank contained approximately 1,500,000 gallons of water. It was equipped with three 20-inch stand-pipes. At the time it was put in service all the gas used in Ardmore was produced in the local water gas plant and distributed at low pressure from the holder.

Later, the intermediate pressure system was supplied by the Ardmore pushers which pumped gas from the holder. Starting in 1920, however, gas was supplied from West Conshohocken and the Ardmore water gas equipment shut down. A governor admitted gas to the holder from which it continued to be distributed at low and intermediate pressures.

Governor Station Redesigned

In 1923, the governor station was redesigned to feed the low pressure mains from the intermediate pressure lines which were now pumped from West Conshohocken, leaving the holder floating on the line. In 1932, the two lower lifts were grounded and in 1937, when the pushers were removed, the holder drips and connections were flooded but the holder was retained as a reserve supply that could readily be made available in an emergency. By 1938, the loads had increased to such an extent that the entire capacity of the holder would have represented only a small portion of the sendout on a winter day. An authorization for the retirement of the holder and boiler plant and simplification of the main system was approved in December, 1938.

Procedures were prepared for this work which was scheduled for the following spring. However, during the last week of February, a leak occurred in the holder and several thousand cubic feet of gas was lost. A two-inch line was immediately run up the side and fastened to one of the crown taps by means of flexible tubing and the holder raised several feet. This method of restoring pressure was quicker than pumping the drip on one of the holder connections and operating the 20-inch valve. The emergency connection to the crown was kept in place until preparations for purging were completed. In view of this occurrence, steps were taken to carry out the purging immediately. In the meantime, the leak had been found near the center of the crown where a seam had been opened up for a little more than one inch, apparently

by a crowbar used for removing ice. The leak was caulked with lead wool.

The purging operation was divided into two parts, the first providing for cutting the two connections on the street side of the holder valves and the second for the purging of the holder itself. Since a means of supplying gas to the holder in case of emergency had been provided, it was now possible to cut the two remaining connections (the third had been cut in 1937 when the pushers were removed). This was done by removing the water from the mains until only the drips remained flooded to seal the holder. A 6-foot length of 20-inch main, which had previously been purged out with CO₂, was removed from each holder connection, a small constant flow of CO₂ being maintained through the section being cut from the instant it was bagged off until it was removed. The atmosphere in the mains had been tested previously, and since it showed a low oxygen content, it was unnecessary to purge them back to the plant yard before cutting. The open ends on

both sides of the cuts were fitted with Dresser test heads and the holder drips once more flooded to the top.

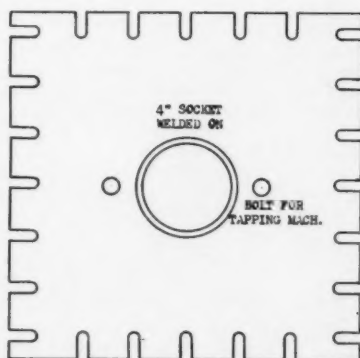
The next step was to provide the necessary vents in the holder crown and lifts. There was a 1-inch tap in the cover of the manhole over each standpipe, but none in the center of the crown. The thickness of the crown sheets (nominally 3/4-inch) was considered insufficient to permit threading them or welding on a reinforcing plate. A steel plate was fitted with a 4-inch pipe socket, rubber gasket and lugs for the tapping machine. This plate was bolted to the center of the crown in which a 3-inch hole was then tapped. A short nipple and 4-inch valve were screwed into the socket. Four 3/4-inch taps were made around the top of the second and third lifts to permit purging out the gas trapped there in the annular cup spaces over the tank water.

Holes Drilled in Crown

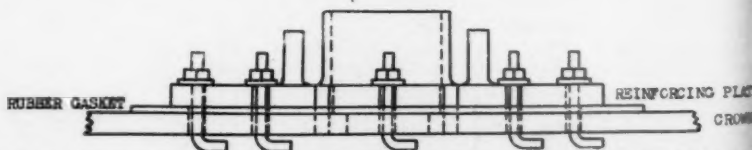
Just before purging was begun, seven 3/4-inch holes were drilled in the crown near the periphery. To detect any oil on the surface of the tank water, a glass tube was lowered through the taps over the standpipes and in the center of the crown, and samples taken. A large quantity of water was also pumped out through the holder skimmer line. None of these tests indicated more than a trace of oil. For a further check, a skimmer was made up to fit through the 3-inch center tap and permit taking a larger sample. Had oil in any great quantity been discovered, it was planned to remove it with this skimmer before purging was begun. When several samples were taken, however, only slight traces of oil were found.

Despite the negative results of these tests, it was determined that steam as well as inert gas would be used in the purging, the steam to be admitted together with the inert gas.

Water taken from the top and bottom of the tank outside the lifts was submitted to the Chemical Laboratory to determine whether it could be safely run into the



Top view



Reinforcing plate in position on crown showing some "L" bolts in place (side view). Thickness of plate and crown exaggerated

storm sewer system. Their report was favorable. Orsat analyses of gas from the holder showed less than 2 per cent oxygen; and combustible indicator tests showed practically 100 per cent combustible gas, so that it was determined to use no screens on the purge vents. Had results indicated high oxygen content, screened vents would have been used to eliminate the possibility of "flash-backs."

To provide power for the Harrison electric motor-driven purging machine, which had been set up about 75 feet from the holder, a 25 K.V.A. 3-phase transformer was mounted on a pole adjacent to the holder site, and a temporary 220-volt service run to the machine. A two-inch line was run from a nearby fire plug to provide cooling water, and a water connection provided for the portable boiler located a short distance from the purging machine. A four-inch inert gas line from the purging machine and a two-inch steam line from the boiler were run to a point near the four-inch tap in the connection to standpipe No. 1, the inert line connected to the side outlet and the steam line to one through outlet of a four-inch tee to provide a slight injector effect. A filler piece was provided to connect the other through outlet of the tee to the tap but was left out for the time being. A 4-inch drain line was run from the purging machine to the holder pit, the water being pumped from the pit and run into the storm sewer. A screen was fitted to the boiler stack to act as a spark arrester. Steam coal was obtained locally.

Purging Preparations

The holder now contained approximately 60,000 cubic feet of gas, some having been added through the temporary connection to provide for any leakage while making the new taps. About 25 MCF of this was burned in the Harrison machine to test its operation. The holder crown rim was now about four feet above water level. The gas line to the inert machine was then connected to the street side of the cut in the connection to No. 1 standpipe, in readiness for purging.

All preparations having been completed, on the morning of March 9 the filler piece was inserted between the inert gas and steam lines and the holder connection, and the pumping of the holder drip on this line begun. In the meantime, the inert machine and boiler had been put in operation, the inert gas and steam being vented at the ends of their respective lines just before the tee. The valves which would later admit them to the holder were still closed. Orsat analyses of the inert gas were commenced and continued at frequent intervals throughout the entire purging procedure.

Standard purge pipes were now installed at the center crown tap and at the three one-inch peripheral taps, and these vents opened to release some gas and allow the holder to fall. A U-gauge was connected to the crown to permit checking the pressure. When the crown rim had fallen to about

one foot above the tank water level and a final check had been made on the inert gas, the crown vents were closed and the drip having now been pumped, inert gas was admitted. The time was 12:20 p.m. Shortly after, steam was let into the holder. During the ensuing hour, the lift rose several feet and all vents were opened, the valve in the center vent now being operated to hold the lift a few feet above its landed position.

The drips in the other two holder connections were now pumped, in each case



Early stage of dismantling. Erected on the holder crown is 90-foot scaffolding structure, which was moved from column to column as the dismantling proceeded

bottled CO₂ being supplied through a tap in the drip head to take the place of the water removed until the water level was lowered sufficiently to permit gas from the holder to flow out. Standard vents were installed on these two connections and purging continued through all vents. The boiler was operated at its full available capacity to maintain the highest possible temperature in the holder. By 4:00 p.m., Orsat and combustible indicator analyses at all vents indicated complete purging. All tests were run in triplicate.

The holder was lowered by opening fully all vents and shutting off steam and inerts. The boiler was shut down, but the inert machine kept running to permit refilling the holder in case of emergency. The manhole plates over the standpipes were removed and eight 5 feet by 3 feet holes cut in the crown (six around the periphery in the second row of sheets, and two near the center). The inert machine was shut down as these openings were being made.

A brief inspection now revealed some oil on the tank water. This did not cover the entire surface but had collected in pools, none of which was located where samples

had been taken. The wooden crown support structure appeared intact and it and the interior of the plates were covered with an oily deposit, samples of which were taken as were samples of the oil.

The next day, the annular cup spaces at the tops of the two lower lifts (see sketch) were purged with bottled CO₂, it being admitted at one of the four taps in each lift, and vented at the other three. Attempts to remove the oil by hand skimming and later by spreading wood shavings over its surface and removing them with a sieve were unsuccessful. It was necessary to rig up the pump, and using a steel drum for a skimmer, pump out a mixture of oil and water which was allowed to separate in a second drum. The water was drained back to the tank outside the lifts and the oil carried away in the drip truck.

A two-inch line was now installed to siphon the water from the tank to the ground outside. Since the tank bottom was only about three feet below ground level, it was possible to drain most of the water without pumping. Although the water had been pronounced safe to run into the storm sewer, a simple apparatus was set up to aerate it. The tank water was run through the aerator and to the sewer over a two-week period.

Ventilation Holes

While the water was being drained, several new, large, crown openings were provided to assure effective ventilation of the interior. When the water was removed, approximately twenty inches of sludge remained on the tank bottom. This resembled mud and was apparently composed of rust and scale from the plates. It was neither tarry nor oily and did not appear to be condensate. To remove it, a 10-foot square hole was burned through the sides of the tank and lifts to permit the entrance of a truck. This residue was sent to the West Conshohocken Plant for disposal.

On April 24, the holder was turned over to the wrecker. He had completely removed the steel work by June 23, and by the end of July the holder pit had been filled in. During the removal of the 300 tons of steel, most of which was accomplished by the use of acetylene torches, a fire hose was kept at hand. The wooden crown-supporting structure was continually wetted, and on the occasions when the scale inside the steel plates commenced smoldering it was quickly extinguished with a stream of water. A scale that would burn with the continuous application of heat from an external source existed inside the tank even below the water level.

While the dismantling of the holder proceeded, work was in progress to install a new district regulator in a new location and at the same time to simplify the intermediate and low pressure connections while eliminating those which would no longer be in use. By the beginning of August, the new regulator was in operation and on August 8 the old regulator and

yard and holder connections which had previously been disconnected were purged out with bottled CO₂ and retired.

Discussion of Methods

REINFORCING PLATE FOR CROWN TAP—This was of 3/4-inch steel, 18 inches square, and with 1/2-inch slots around the edge. The slots permitted slipping "L" bolts through corresponding holes in the crown. The heads were removed from 6-inch by 3/8-inch standard wrought iron bolts and 1 1/2 inches of the unthreaded ends bent at right angles while hot. The thread was extended. These were easily installed and much stronger than the largest toggle bolts available. A square rubber gasket, red-lead on both sides, was used.

DRILLING CROWN—Holes in the crown were made with an air drill to avoid the hazard of sparking that would have attended the use of an electric tool.

OIL ON TANK WATER—The methods used to detect oil on the tank water proved inadequate. Reasonable assurance of discovering dispersed oil can be had only by taking a number of samples and at least one ring of six or more equally spaced 3/4-inch taps should be provided near the periphery of the crown in addition to a 3-inch or a 4-inch tap at the center. A second row of holes may be desirable in a large holder. Since nearly all of these are required as vents, their installation involves little additional expense. The 3/4-inch taps will accommodate a glass tube in which a sample can be taken that will show the thickness of the oil layer. The 3-inch or 4-inch tap will admit a small skimmer with which a larger sample is obtainable.

Removal of the remaining oil should be commenced immediately after opening the holder, if this is feasible. It is most readily accomplished by dropping a flexible pump suction line into a drum or tub forced just below the water level to act as a rough skimmer. A mixture containing as little as 10 per cent oil is pumped out and separated in a drum, the water being drained outside the lifts. Complete removal of the remaining thin film is unnecessary, but may be accomplished by spreading wood shavings on its surface and retrieving them with a large sieve. Since the shavings blow around considerably, this method is advisable only where there is ready access to all parts of the water surface.

Oil samples taken after the Ardmore holder was opened had a flash point of 195 degrees Fahrenheit, which is fairly low for gas oil, and probably indicates absorption of gas and condensate. There was no permanent emulsion present, the oil separating readily.

PUMP—A one-cylinder, portable, Home-lite gasoline pump (rated at 4,500 gallons per hour at 10-ft. head) was used for pumping drips and skimming oil. Its use permitted all pumping to proceed rapidly. Knowledge of pump capacities with vari-

ous sized suction lines permits using the equipment to best advantage.

BOILER—A portable, vertical, 20 horse power, tubular, coal-fired boiler was used. The 100-ft. steam line was covered with earth for insulation. The average atmospheric temperature during the actual purging was 60 degrees Fahrenheit, and the boiler pressure ranged from 25 lbs. to 45 lbs. gauge. A crown temperature of 100 degrees Fahrenheit was reached.

PURGING MACHINE—A Roots-Connersville, Harrison Inert Gas Producer, rated at 35 MCF per hour at 3 lbs. pressure, was used for the purging. It was operated with reduced cooling water to give a gas temperature of 170 degree Fahrenheit to help raise the crown temperature. The average analysis of the inert gas was: CO₂—13.0 per cent; O₂—0.2 per cent, CO—0.8 per cent.

DEPOSIT—A 1/8-inch layer of oily, fluffy, dark brown deposit covered the inner side of the crown plates and the crown supporting structure. When dried, it powdered easily. On a dry basis, it contained 34 per cent volatile matter which would burn only when heat from an external source was continuously applied. With the loss of the volatile matter, a black, carbonaceous residue remained. This contained considerable ash which was probably iron. The

deposit was not felt to introduce any great hazard to the wrecking operations, but as stated above, a fire hose was kept on hand during acetylene burning.

PURGING ANNULAR CUP SPACES—The annular cup spaces of the lower lifts of a holder contain a considerable quantity of gas. In recognition of this fact, these spaces of the Ardmore Holder were purged independently with CO₂ as previously mentioned. When a lift is to be grounded for an appreciable length of time, it may be advisable to purge it out or connect it temporarily with a source of gas under low pressure. Otherwise, since the annular space is sealed off from the holder, a small leak may dissipate the residual pressure and possibly cause the formation of an explosive mixture. If the tank water is lowered, or the temperature drops appreciably while the lift is landed, a slight suction in the space may result. Even if no other precaution is taken, a U-gauge should be installed on the lift while it is landed.

DRAINING WATER—An aerator, consisting of a wooden basin 6 feet square, on which was mounted a horizontal 2-inch pipe in which several vertical nozzles were installed, was used to aerate the tank water. Because of the slow rate at which the water was released, this simple apparatus produced sufficient aeration.

Pipe-Line Coating Tests Completed

HIGHLY important information about the serviceability of various types of protective coatings for petroleum and natural gas pipe lines will be gathered in the spring and summer of 1940 when final inspections are made of hundreds of test coatings which have been in service in all parts of the country on sections of working pipe lines and other pipes for 10 years.

The sample coatings were installed in 1930 as a cooperative undertaking of the American Petroleum Institute, the National Bureau of Standards and the manufacturers of protective coatings, in an attempt to determine the value of different types of coatings under varying soil and operating conditions.

The final tests, which will be made under the supervision of the Bureau of Standards, include: soil resistivity measurements; current on working lines; pattern tests for location of pinholes; coating resistance; inspection of coatings; and measurements of pit depths. It is expected that photographs of each coating will be taken.

Tests tentatively are scheduled to start in March, continuing with few interruptions until August. The schedule is so arranged that the same inspectors may view all tests, giving greater comparability and completeness than otherwise would be possible. The first report will be presented at the Insti-

tute's 21st Annual Meeting at Chicago in November.

Because of the unusual opportunity to collect important first-hand evidence, however, the Institute's Topical Committee on Pipe-Line Technology has decided to permit any interested individual or company representative to be present when the test coatings are exposed. K. H. Logan, chief, Underground Corrosion Section, National Bureau of Standards, Washington, D. C., will furnish schedules of test locations, coatings, and dates, and make arrangements to keep anyone wishing it informed of changes in the schedule.

Supplying Gas for Motor Fuel

COMPRESSED gas in cylinders in unlimited supplies for use as a substitute for gasoline is shortly to be made available for motorists throughout Britain, according to a report in *The Gas Times* for December 23. It is stated that the equipping of 3,000 garages with the necessary apparatus for supplying the gas was in hand and the vast network of gas service stations would be ready in about three months' time.

A garage could equip itself as a gas filling station for under 200 pounds, it was pointed out. One or two garages have already installed the apparatus and soon there will be at least 3,000 in all parts of the

country which will obtain their supplies direct from the gas grid.

There are four different methods of converting any kind of petrol or diesel engine vehicle to gas and it need not be an expensive operation. In some districts gas giving a performance equal to one gallon of petrol would cost only $6\frac{1}{2}d.$, and in no district is it likely to cost more than $1s. 2d.$

Important centers will be served by large compressor stations distributing gas under a pressure of 5,000 lb. per sq. in.

Air Conditioning Planned as Public Utility

THE first air-conditioning system in the United States to be operated as a public utility will be installed in the downtown business area of Galveston by P. E. Nicholls, Jr., who recently obtained a 50-year franchise from the city council for the project. Construction of the plant must be started not later than June, 1940.

The distribution system will be operated from a central steam-generating plant where a vacuum jet cooler will be installed. Cold water will go out from the plant through underground mains, circulating through air-conditioning units in various buildings and then return to the plant for recooling. Individual units, set up in stores, offices, and other places, will be equipped with cold water coils, air blowers, air filters, and thermostatic temperature controls. This service will be metered.—P. U. F.

Gas Appliance Inspection Program Completed

NEW records were achieved by the inspection department of the American Gas Association Testing Laboratories in completing its annual inspection program, according to Franklin R. Wright, chief inspector. This was the first year that all annual inspections were completed before the end of the calendar year.

In compliance with instructions of the Association's Executive Board, inspection activities were still further increased over previous years. Likewise, the record number of appliances and accessories submitted for approval and particularly the added number of manufacturers doing business with the Laboratories materially increased the number of annual inspections made. Considerable enlargement of the inspection staff, through the addition of several engineers, was thus made necessary.

Over 500 inspection visits were made in the last few months, of which a total of 351 annual inspections were made in manufacturers' factories and warehouses. This represents an increase of 12.5 per cent over the number of inspections conducted in

1938. Seventy-seven per cent of this number was conducted from the Cleveland Laboratories and the remainder from the Pacific Coast Branch.

Complete results of these annual inspections have not been compiled to date. Preliminary analysis, however, indicates good cooperation on the part of manufacturers with the Association's policies and that their equipment examined was constructed in accordance with the models originally approved at the Laboratories. Unannounced inspection visits to factories, as well as to dealers' and jobbers' warehouses and sales floors, substantiate these favorable conclusions.

A considerable number of informal calls were made on gas company officials, municipal building and appliance inspectors, dealers and jobbers to acquaint them with the Laboratories' certification program and its significance. By this means greater cooperation is obtained in furthering the American Gas Association's appliance testing program. Several more municipalities are now drafting ordinances based upon the Association's requirements. Likewise, dealers everywhere are insisting more and more that gas appliances on their sales floor bear the Laboratories' Seal of Approval.

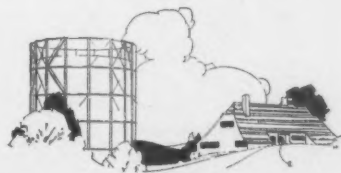
Book Reviews

Mathematical Theory of Non-Uniform Gases by Sydney Chapman and T. G. Cowling. New York: The Macmillan Company; Cambridge: University Press, 1939.

Completely mathematical in approach, as indicated in its title, this new book on the theory of gas behavior gives an account of the kinetic theory of gaseous viscosity, thermal conduction, and diffusion in gases.

In the introduction, the authors state that their purpose is to elucidate some of the observed properties of the natural objects called gases. The method used would not do this for most of their engineering readers, yet, this should not be a criticism of their effort to present the mathematical theory of the behavior of gases. They tried to explain the things that are seen and that are directly measurable by means of imagined things that are not seen and not directly measured; and, yet, on the whole, they have built up their equations from the classical laws of gases and have only briefly touched upon the Quantum theory.

According to the Preface, the book is ad-



dressed to the mathematician and the theoretical physicist and, therefore, it will not appeal directly to the gas industry though its subject is entirely confined to gases. An effort has been made to serve the need of laboratory workers in chemistry and physics by collecting and stating the chief theoretical formulas and discussing them in relation to the best available data.

The book is 404 pages, 6" x 10", and its price is \$7.50.—C. GEORGE SEGELER.

West Virginia Geological Survey. Volume XII, 1939. Limestones of West Virginia.

One of the series of geological reports published by the State of West Virginia, the present volume is of considerable interest to gas companies who have lime, cement or mineral wool plants on their lines.

The first three chapters of the book are devoted to the geology of limestones, but in the latter half of the book, there is information on lime kilns, cement kilns, and on mineral wool production.

From the gas industry's viewpoint, the chapters dealing with the economic phases of limestone could have been given more extensive treatment. By so doing, the book would have lost its essential character which is a geological report on the limestone occurrence of West Virginia. A large map of the state showing lime bearing areas is enclosed with the book.

The book does not indicate how it can be obtained, but presumably it is available on application to Paul H. Price, State Geologist, Morgantown, West Virginia.—C. G. SEGELER.

Science and Practice of Gas Supply by Arthur Coe.

All who are concerned with the technical side of the gas industry will be interested in the third and final volume of Arthur Coe's "Science and Practice of Gas Supply," just published in England.

The new volume, which has 847 pages, 420 illustrations and 160 tables, is distinguished by the treatment of design in gas supply practice.

New formulae are given for the calculation of the design load and the determination of the most economical sizes of service pipes, mains, feeder-mains, distributors, high-pressure supplies and boosting plant. Extensive comparisons of actual results obtained with various flow formulae are also given. Similarly, there are improved formulae for use in the design of hot water supplies and central heating systems, including the heating arrangements for swimming baths.

Two chapters are devoted to the use of gas for power, and there are chapters on combustion, test burners, gas measurement (including the verification and testing of station meters), and load factors and diversity in gas distribution.

Further details can be obtained from the publishers, the British Commercial Gas Association, 1, Grosvenor Place, London, S.W.1.

First CP Rangers



First two CP Rangers from one company in the state of Wisconsin is the proud record of Henry Heibing, left, and Arwin Olson, of the Wisconsin Public Service Corp., Sheboygan. Both men reached their total of 25 CP gas range sales during the Christmas season

Panhandle Expansion

PANHANDLE Eastern Pipe Line Co. has announced details of an expansion program involving the expenditures of approximately \$3,500,000.

The program consists principally of the installation of approximately 137 miles of 24-in. and 22-in. main line loops. When completed it will add between 25 and 30 million cubic feet of gas per day to the company's delivery capacity, thus enabling it to meet the increasing demand of its customers already connected to its pipe-line system, as well as to serve additional customers in its trade territory.

Hope Natural Moves to Clarksburg

AFTER April 1, the Pittsburgh, Pa., offices of the Hope Natural Gas Company will be located in Clarksburg, W. Va., where an addition is being made to the company's office building. The latter city will be the main headquarters of the company according to an announcement by L. L. Tonkin, president and general manager.

Plan Gas By-Product Plant Expansion

PURCHASE of 36 acres of industrial property with water frontage to provide for expansion of the gas and by-products plant of The Portland Gas and Coke Co., Portland, Ore., was announced recently. Since construction of the plant in 1912, this company has developed a by-product business which grosses more than one million dollars annually and supports a quarter-million dollar payroll.

By-products include approximately 1,500,000 gal. of motor fuel benzol a year used in the manufacture of more than

50,000 tons of Gasco briquets, 1,500,000 gal. of tar road binder and such chemical products as naphthalene, toluol, sulfur, and carbon bisulfide.

The company has its own dockage facilities for tankers bringing residuum from gasoline cracking plants for processing.

Patent Flat Enlarger

A MEMBER of the advertising profession sent in a clipping of an advertisement used by The Gas, Light & Coke Company of London, England. It is an advertisement for a background heating device which is intended to make all parts of a room with an open fire warm. In the words of the sender:

"If you have read 'With Malice Toward Some,' or if you have ever been to England, or even if you haven't been through either of these bitter experiences, you may know of the winter huddling-around-the-fire which is supposedly caused by the lack of steam heat—or central heating."

But the Britishers say it this way:

"Do you know about Mr. Therm's patent flat and house enlarger? How background heating makes a room three times as large in winter? Then it shows two cartoons, one before and one after using the house enlarger, the second of which shows the

house practically double in size. With this pleasant little bit of English humor the added convenience that the heating device brings to the British householder is cleverly dramatized.

—Printers' Ink

Engineers Elect Welsh

JOSEPH J. WELSH, superintendent of production of the New York & Richmond Gas Co., Stapleton, N. Y., has been re-elected to the presidency of the Richmond County Chapter of the New York State Society of Professional Engineers. In addition to this office, Mr. Welsh is president of the Rotary Club and vice-commander of the local American Legion post.

The gravimeter, "divining rod" of modern gas and oil well prospecting, is made of aluminum wire so delicate that it would take 108,000,000 feet of it to weigh one pound.

The world's deepest well, Kern County Land No. 2 in Wasco, California, is producing oil from a Miocene formation laid down on ancient sea bottoms 20,000,000 years ago.

Personnel Service

SERVICES OFFERED

Engineer, thirteen years' experience including design of gas equipment, burners and furnaces. Formerly research associate to U. S. Bureau of Standards for A. G. A. Laboratories. Heavy experience in air-conditioning, combustion engineering, refrigeration and sales. Desires permanent connection with utility or manufacturer. (37.) 1325.

Gas engineer-manager open for position. Experienced in coal and water gas operation, high and low pressure transmission and distribution, servicing, general operating problems and public relations; references. 1328.

Manufacturers' sales executive with broad experience. Utilities and distributors in East. Excellent record and reputation. Outstanding contacts. Desires change. 1340.

Young man, two years of college, ten years with one of largest gas companies, last six years spent in sales promotional activities, familiar with all types of gas appliances, experienced with advertising in newspapers, circulars, pamphlets, etc., ambitious looking for future, willing to travel. 1341.

Sales Developer—Basically trained in engineering and business administration. Wide experience in merchandising covering market analyses, sales promotion and sales administration on a national scale for both consumer and trade sales where the factors of sales engineering and contingent service have been important. 1342.

Utility Accounting Methods man offers B. S. and post-graduate work in accounting; experience in accounting methods with large utility; sales and installation experience in accounting machines and systems in utility and other lines of business; experience in utility operating departments. 1343.

Manufacturers Representative (37) eighteen years' successful sales background with dealers and utilities, desires position, prefers Atlantic Seaboard, with reliable manufacturer domestic or hotel equipment. 1344.

SERVICES OFFERED

Technically trained, experienced, commercial, industrial or house heating sales **merchandiser** whose knowledge of rate making, budget control, advertising along with proven sales methods and sales ability will increase and sustain revenues. 1345.

Operator-Manager; twenty-four years' experience. Sixteen years direct plant operation both coal and water gas and plant design and construction. Eight years as manager of 6000 meter property with fine earnings. Especially successful in developing personnel and in public relations work. 1346.

Salesman covering Metropolitan area, New York, and 200 mile radius. Established trade for past 15 years on territory in full lines of major gas appliances for nationally known manufacturers; establishing markets in the plumbing and heating goods, through gas companies, distributors and contractors, through own initiative. 1347.

Manufacturer's representative with excellent metropolitan New York utility contact selling automatic gas storage water heaters and accessories, boiler and pipe compounds on commission basis would like to add to line non-competing specialties of merit. 1348.

Aggressive young man desires change with future. Two engineering degrees. Eight years' extensive experience with large leading natural and manufactured gas properties on distribution—construction, engineering and operation; **appliance servicing**, testing, and servicing education. Excellent references. (35, married.) 1349.

Mechanical Engineer (MSc) thoroughly experienced in gas research and laboratory work. Also have a complete knowledge of gas water heaters. Interested in any work pertaining to the above. Married. (42.) 1350.

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